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ABSTRACT

This report's introductory section notes that both rural and gifted education have received relatively little funding and national attention, and few studies have considered the two issues in tandem. As a first step in the process of strengthening the education of gifted rural students, this report assesses the current state of gifted rural education. Section 2 gives a brief history of rural education in America, noting that today's educational model is essentially a continuation of the common school movement of the mid-1800s, whose emphasis on standardized age and ability grouping resulted in consolidation efforts that are still ongoing. Section 3 recounts the history of gifted education; notes that it has continually been sabotaged by myths and stereotypes; and presents the latest two misconceptions, about the benefits of technology and higher standards. Section 4 reiterates the fact that there is little information of any depth regarding rural and gifted education and cites three recommendations for research into rural gifted education. Section 5 examines the variety of definitions of "rural," and the frustration this causes. Section 6 discusses the unique qualities of rural schools and their implications for gifted education. Sections 7 and 8 present survey results concerning school characteristics in the 20 most rural states, and gifted education practices and obstacles in rural schools. Section 9 proposes seven recommendations for providing effective programming for gifted rural students. Appendices present survey forms, related tables and figures, 71 resources, and 154 references. (TD)

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GIFTED EDUCATION IN RURAL SCHOOLS:

A National Assessment

ED 430 766

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2002/997

The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development

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GIFTED EDUCATION IN RURAL SCHOOLS:

A National Assessment

The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development

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Dedication:

In memory of David W. Belin (1928-1999)
and in honor of Henry B. and Jocelyn Wallace,
Henry D. Wallace, and Linda Wallace-Gray.

Acknowledgments:

Within the Belin-Blank Center the following individuals were instrumental in the creation of this report: Pamela Bullers, Administrative Secretary; Frances Blum, Secretary and Administrative Assistant for Talent Searches; Bridget Pauley, Secretary; Rachelle Rich, Secretary; Maria Villarreal, Secretary; Jerilyn Fisher, Administrator for International Programs and Conferences; Brian Sponcil, Administrator for Computers and Technology; Jan Warren, Administrator for Student Programs and Talent Searches; Ann Donovan, Administrator for Development and External Relations; Laurie Croft, Administrator for Professional Development; Debra Johnson, former staff member; Erin Perry, student; Han-Wei Chen, graduate student; Michelle Muratori, graduate student; and I-chun Chen, graduate student.

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We are also grateful to Shannon Heiman for her wonderful design of the publication and to Kim Van Meter for her proofreading assistance.

February 24, 1999

Dear Dr. Colangelo,

On behalf of the National Rural Education Association, I am happy to endorse the Inaugural Wallace Family National Conference on Gifted Education in Rural Schools. This event addresses a topic of high importance to rural educators everywhere.

It is problematic, to say the least, for many rural schools that are doing the best job possible with limited resources, to provide for the diverse needs of their students. This conference will provide significant insights into ways to accomplish the task while preserving the unique traditional values and ideals of rural schooling.

We salute you on the launching of this important conference and wish you every success.

Sincerely,

Joseph T. Newlin
Executive Director,
National Rural Education Association

March 3, 1999

Dear Dr. Colangelo,

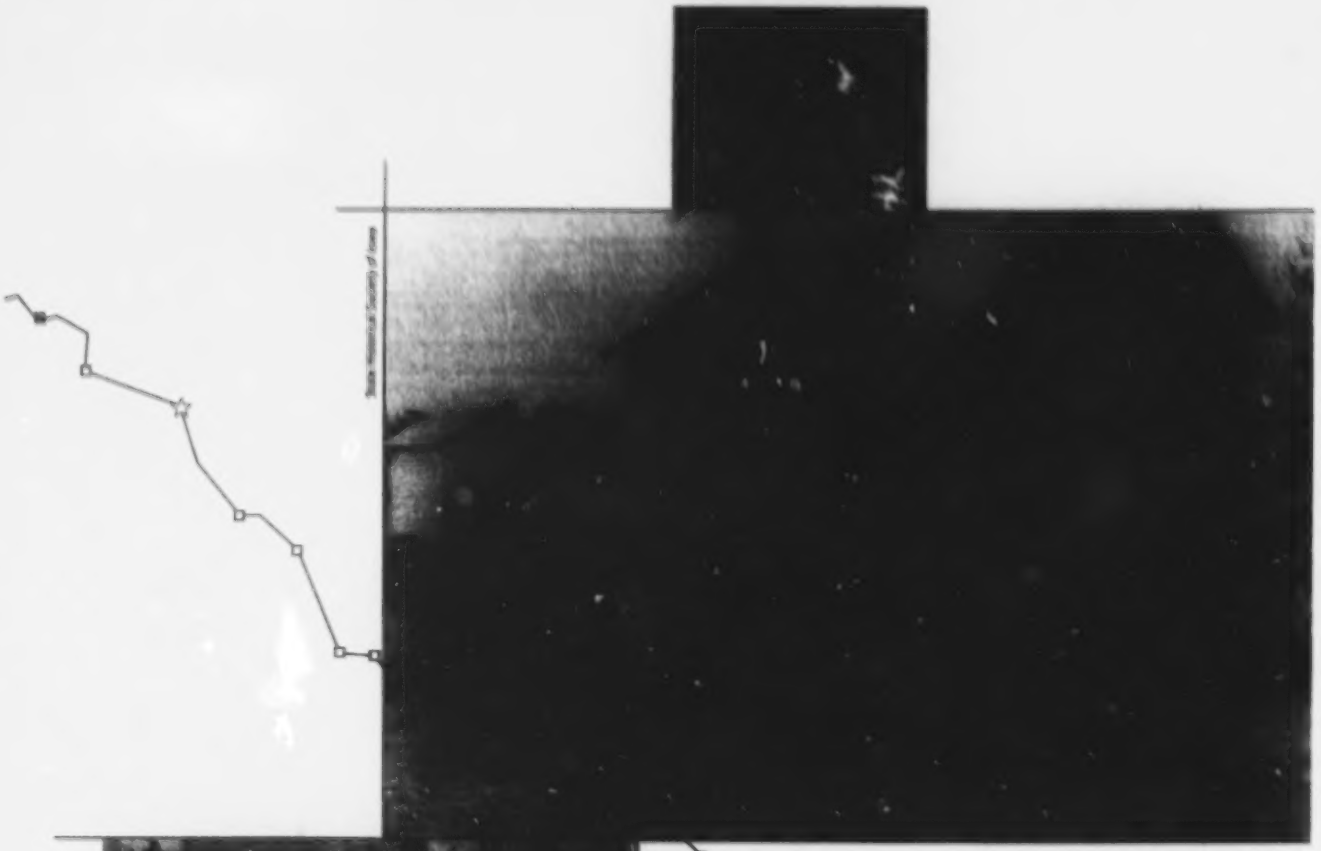
The National Association for Gifted Children is proud to support the work of the Belin-Blank Center in the area of gifted education for children in rural school districts.

We believe that gifted education programs must be a part of every school district if we are to challenge each child to reach their full potential. We recognize that rural educators face additional problems in securing high level learning opportunities for their students.

We applaud your work in developing a national assessment of where we as a nation stand with regard to the needs of these students and educators.

Sincerely,

Peter D. Rosenstein
Executive Director,
The National Association for Gifted Children



We find it interesting that many of the hallmarks of rural schooling, including mixed-age classes and a high degree of community-school interaction, are again in vogue. It is time to listen to the wisdom of rural schools.

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American schools on the brink of the next millennium are obviously different places than their 19th century counterparts. The introduction of computer labs, the racial integration of schools, and the grouping of classrooms by age comprise some of the most radical changes our schools have undergone in the last century. But as every kindergarten teacher or professor of education knows, many facets of our schools have stayed the same and many so-called innovations have come full circle. The common school movement of the mid-1800s, itself a reaction to industrialization, created a model of schooling that continues to be very much in use to this day, with relatively large classes of students working in rows, waiting for a bell to sound, and moving from one distinct subject area to the next.

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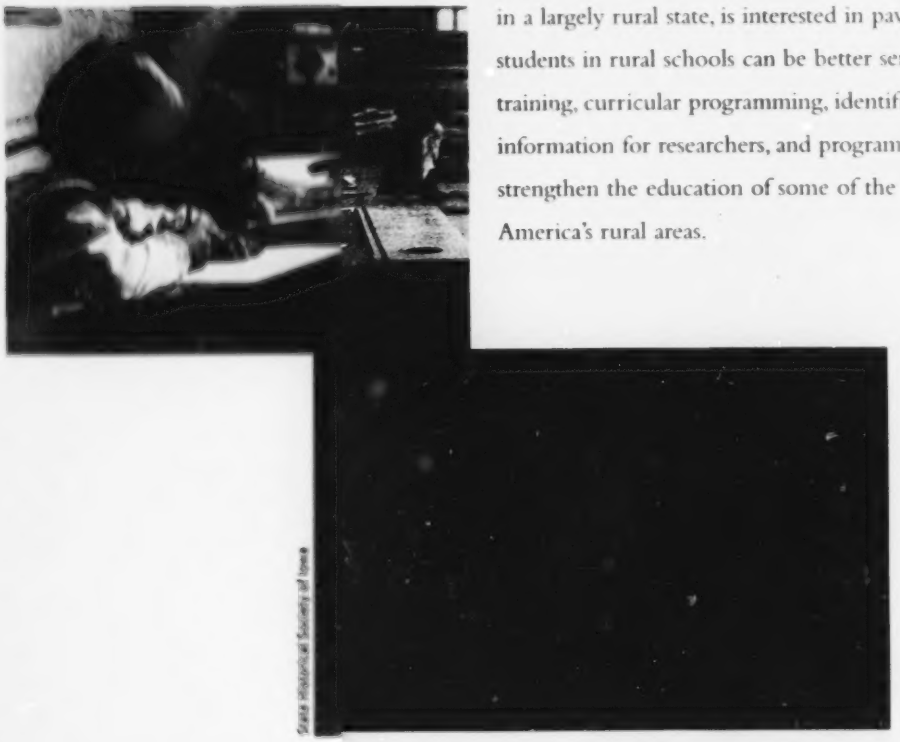
The location and size of the buildings that house the students educated under this model are different than those of the typical 19th century school. Because our country has become increasingly urbanized, larger schools are now more likely to be located in or near a large city than they were 100 years ago. With this urbanization, America's rural roots have come to be either sentimentalized or viewed as a backwards period from which we have evolved. Both of these views ignore the fact that a considerable part of this nation remains rural. Outside of the shadow of cities and suburbs, a ubiquitous landscape of woodlands, seashore, mountain ranges, and farmland extends from coast to coast. The implications of this rural landscape for current educational funding and research is significant: 50% of all public schools in the United States are in small towns and rural areas, and 39% of all public school students—nearly 17,500,000—live in small towns and rural areas. Clearly, rural education is not a part of our past, and the issues related to rural education cannot be dismissed along with a nostalgia for calico-clothed children trundling down dusty lanes toward a whitewashed schoolhouse. Rural school districts include a sizable group of schools and students who deserve our immediate attention.

When examining rural education side by side with gifted education, some striking similarities appear. Both have borne the brunt of educational fads, and both have received relatively little funding and national attention. Not surprisingly, very few studies have considered the two issues in tandem. The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development (the Belin-Blank Center), an internationally recognized center of gifted and talented education, located in a largely rural state, is interested in paving a path by which gifted students in rural schools can be better served. By providing teacher training, curricular programming, identification methods, statistical information for researchers, and program evaluation, we hope to strengthen the education of some of the most able students in America's rural areas.



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A first step in this process is to take the current pulse of gifted education in rural schools. That is the aim of this report. While gifted education has made great strides in the latter half of the 20th century, focusing attention on the barriers of race, gender, and poverty in identifying and providing opportunities to gifted students, little attention has been paid to geographical barriers. Today, we have a much better idea of what is happening to serve our most able inner-city students, and we have models of successful programming for these students. Nothing on a similar scale, however, is available for those educators and parents working to improve the schooling experience of gifted rural students. While we know that rural schools are dedicated to helping gifted students, there has been little attempt at providing ample assistance or developing a national network to serve these students.

One important lesson learned from inner-city gifted programs is that the culture of the participants must be taken into consideration in order to achieve success. A curriculum that has worked for suburban children cannot be dropped whole onto an urban school and be expected to flourish. Likewise, a major challenge for identifying and providing for gifted students in rural schools is to respect and maintain the strengths of the rural school and its surrounding community; a fluid integration is our goal. Consolidation efforts, started more than a century ago and ongoing today, have aimed largely at standardizing rural schools and "suburbanizing" out their unique qualities. We do not view such homogeneity as a desirable or appropriate goal. Rather, we find it interesting that many of the hallmarks of rural schooling, including mixed-age classes and a high degree of community-school interaction, are again in vogue. It is time to listen to the wisdom of rural schools.

In addition to this report, which strives to provide a readable, comprehensive documentation of gifted education in rural schools, we will also host the first Wallace Family National Conference on Gifted Education in Rural Schools. This conference, held on May 21-22, 1999, at The University of Iowa, will bring together experts from both rural education and gifted education to articulate the challenges and needs of future work in this field. Together, the conference and report will begin to delineate a map to follow as we work to improve both our understanding of and our services to the ablest students in America's smallest communities.

"What we

lack in size,

we gain in pride."

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It is difficult for many Americans to remember that at one time the overwhelming majority of our nation's students were rural. In terms of population, small communities have been losing ground since the latter part of the 1800s. During the Civil War, for example, four out of five Americans lived in communities of fewer than 2,500 residents. (As will be examined later in this report, a community of fewer than 2,500 people is now a common definition of *rural*.) Even in 1913, half of all American school children attended one-room schoolhouses. These schools were truly of and by their communities. Because the American Constitution does not mention education, the onus was on parents and their neighbors to establish and fund schools.

Reform Comes to the Country

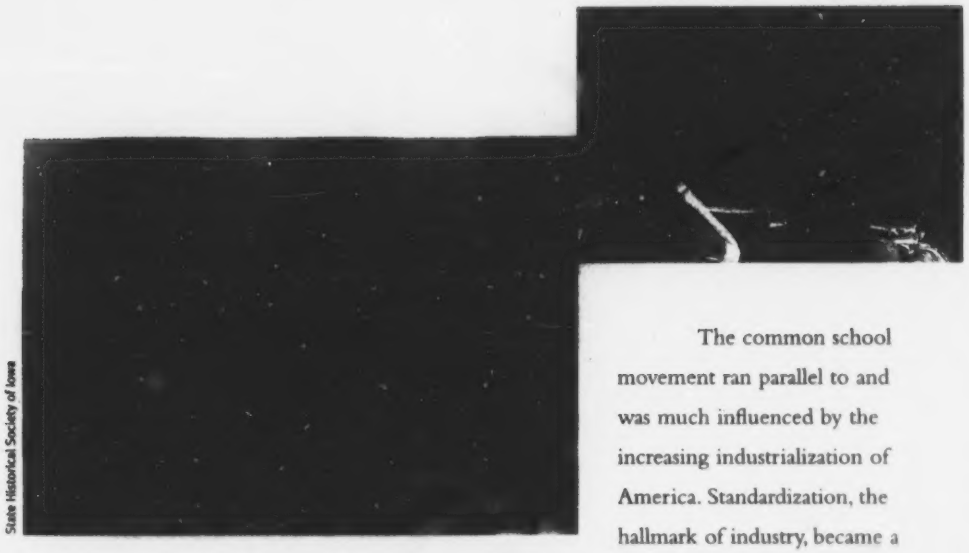
Early attempts were made to provide for education through legislation. In 1642, the Massachusetts Bay Colony enacted a law requiring every town to make certain that its children could read and understand their religion. The Bible was the central text used by students in pre-Revolutionary America; although there were other texts such as the New Primer, developed by a Quaker schoolmaster around 1700, they were all religious in nature, using examples of sin and moral behavior to teach reading and spelling.

Nearly a century later, the Land Ordinance of 1785 provided federal land for "school support." During the expansion of the 1800s money in new communities was supposed to be allocated to school buildings via land sales. The land was often so cheap, however, as in the West, or at such a premium, as in the South, that this plan didn't provide sufficient funds. For the most part, parents oversaw the building of schools and the hiring of teachers. They often dictated what was taught and provided any resources, including books, to which a teacher might have access. Some communities mustered more funds and materials than others, but rural schools across the young country shared many of the same shortcomings: poorly trained teachers, out-of-date materials, and dilapidated buildings.

Beginning in the late-1830s, education reformers, notably Horace Mann and Henry Barnard, supported the right to free public education. The common school movement, as it was called, demanded compulsory taxation for the support of schools. This proposal was not immediately popular, especially to citizens without children. A war waged from state to state over this issue, with local elections won and lost because of it. By 1870, the issue was largely settled, with almost all states having passed taxation legislation. The rural school districts which established attendance policies, collected taxes, and hired teachers, served as "laboratories of democracy" and were the essential model for the common school movement.

Color Code:

Time Line	General	Gifted	Rural	1636	1647
				Harvard University is established.	*The government of Massachusetts Bay enacts the first statute in America providing for the establishment of a school system.*



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The common school movement ran parallel to and was much influenced by the increasing industrialization of America. Standardization, the hallmark of industry, became a central tenet of education reformers. Because students, especially in large, urban schools, began to be grouped more frequently by age and ability rather than being taught together in multi-age groupings, it became necessary to formalize a set curriculum. By the mid-1800s, for example, Chicago's schools had gone to a graded system (although year-long classes strictly separated by age as we know them today were not the norm until the early part of the 1900s). The city's superintendent created a forerunner to today's scope and sequences, *A Graded Course of Instruction*, anticipating the need to neither repeat nor omit material from year to year.

Eventually, standardization made its way to rural schools as well. *The McGuffey Reader*, a popular standby and one of the most widely owned books throughout the less populated parts of the country (more than 122 million copies were distributed between 1836 and the 1920s), fell into disrepute. As Andrew Gulliford notes in *America's Country Schools*, many reformers "criticized country schools as being out of step with the 20th century," even though they excelled at achieving some of the goals that reform heralded, such as the development of teamwork and job skills. Contemporary scholars and historians have criticized the standardization and consolidation movements, arguing that rural students lost connection to their communities as a result. Just as revisionists now view the "Americanization" of immigrants during approximately the same period in history as a forced stripping of their heritage, Gulliford and others believe that "the standardization of country schools destroyed local community autonomy and students' understanding of their own indigenous regional backgrounds."

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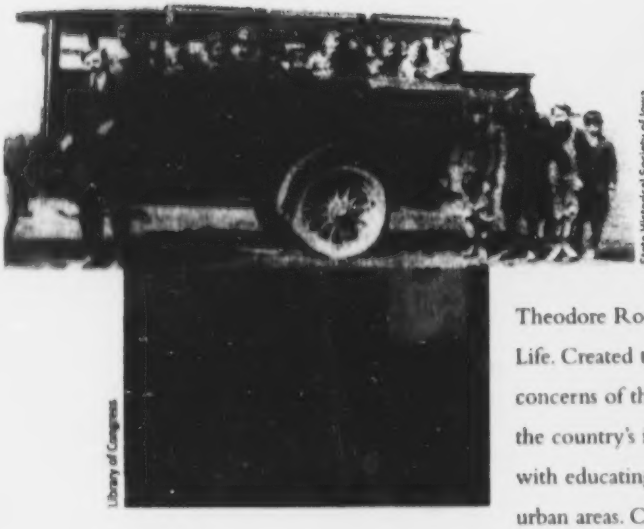
17th and 18th centuries	1784	1800-30
According to Calvinist doctrine, children are believed to be inherently evil and born into sin. This thought prevails until the teachings of Rousseau (1712-1779) and other Enlightenment thinkers become popular. These latter thinkers view children as blank slates who are shaped by their environments.	*The Land Ordinance provides a legal framework for education in the Northwest Territory.*	*So-called "monitorial schools," popular in urban areas, are the first American schools modeled after factories.*

Consolidation or Bust

The central principle of standardization was that a single curriculum should be presented to same-age students working at the same pace with a qualified teacher. Since smaller schools had neither sufficient numbers of students of the same age or ability-level nor more than a couple of teachers, at most, consolidation was necessary to achieve the reformists' goals. The advent of school buses (the first buses appeared in the 1920s, though the yellow bus we know today didn't appear until 1939) made the movement of students over great distances more practical than it had been previously. Across the country, schools from neighboring townships joined together to form larger institutions. In the process, at least one school became extinct for each consolidation.



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As early as 1908, the push for consolidation was getting support from national leaders, including President Theodore Roosevelt, who formed the National Commission on Country Life. Created to address a myriad of rural problems, one of the biggest concerns of the Commission was "the rural school problem." Reflecting the country's increased mechanization, the commission was concerned with educating young people for the industrial work then common in urban areas. Consolidation advocates argued that while young people from rural areas were leaving their homes in droves, they were ill-prepared for the jobs they found in cities. Rural residents viewed the situation differently. They saw that consolidation caused children to travel away from home for schooling, thus disassociating education from their home community. The long-term effect was to encourage these students to leave rural areas for larger urban ones.

Despite the relative lack of support for consolidation on the part of rural residents, advocates of the movement, such as Stanford professor Ellwood Cubberly, proclaimed that consolidation was necessary to "redirect and revitalize" country schools. The movement was certainly successful in terms of meeting its statistical goals. The number of one-room schoolhouses began to shrink dramatically. By 1911, there were already 60 consolidated schools in Iowa, 120 in Washington, and 210 in Louisiana.

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1820	1824
During the next 30 years, the percentage of agricultural workers falls from 58% to 15% as agriculture is more mechanized and factory work in cities becomes more available.	*Robert Owen establishes a utopian community, New Harmony, and bases the education system largely on the Swiss Pestalozzian method in which education is viewed as a vehicle for social reform. It is a precursor to reform efforts later in the century that will be focused on issues such as immigration and urban poverty.*

WORK PREPARATION AMONG THE DOUGLAS FIRS: CAREER CONNECTIONS

Located east of the Cascade mountain range in Washington State, the Tonasket School District, is preparing its 1,248 students for 21st century careers. The town of Tonasket itself has a population of just under 1,000, and more than half of the district's enrollment is eligible for participation in the federal free and reduced lunch program. It is truly an isolated district, just 20 miles from the Canadian border, with its closest "big" neighbor being the town of Omak (pop. 4,435) more than half an hour away. Still, Tonasket has creatively found ways to challenge its students and to present them with new experiences.

Foremost in this effort is the Career Connections program that exposes academically talented students to career opportunities. Kate Hagen, the program's coordinator, explains that students shadow a member of the school staff in order to prove their commitment and responsibility before being assigned to a job shadowing internship opportunity in the community. They also work with school staff to assess their abilities and interests, and to identify careers that could be a good match for their skills. For their job shadowing, students have worked in such areas as law enforcement, medicine, and journalism. One student who hopes to enter veterinarian school, says Hagen, has split her time between a vet's office and a radiology laboratory at the hospital. At the end of a Career Connections experience, students share their portfolios with a panel from the community and participate in mock job interviews.

Jessica Anderson, a Tonasket senior, has been working in the local hospital in preparation for studying health care in college. Describing the work she does as a nursing assistant in an email to the authors of this report, she wrote, "I have observed the removal of a cancerous growth, a fibroid biopsy, and an extremely bloody emergency room procedure involving a man with a ruptured artery." A member of the National Honors Society, Jessica says that the experience has expanded her "narrow visions of a nice little nurse in white to someone who is deep in the middle of all the action." She has clearly been challenged by the experience and widened the scope of her future goals as a result of this creative, community-centered program.

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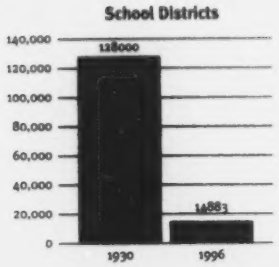
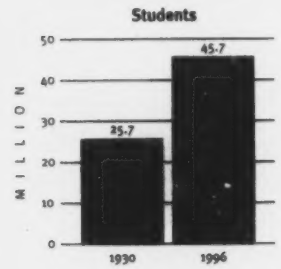
1836

McGuffey's Readers are first published. One of the first widely popular, mass marketed textbook series, they are especially significant to country schools with few other resources.

1837

Horace Mann (1796-1859) publishes the first of his 12 annual reports that he wrote as Secretary of the Massachusetts Board of Education. The reports covered almost every aspect of schooling and education, including Mann's blueprint for the Common School.





Throughout the early part of the century, small and rural schools were attacked by those who viewed them as inefficient and outmoded. The Great Depression of the 1930s was, of course, unkind to education in general, as schools tried simply to survive and provide the most basic services. But even in the ripe years following World War II, rural schools found few supporters. One of the greatest blows came from James Conant, who in 1959 published his influential report, *The American High School Today*. Conant recommended that schools have a minimum of 750 students in order to effectively offer "comprehensive" curricula. Smaller schools were advised to consolidate in order to meet the standards set by larger schools.

The march for "bigger, better" schools continued throughout the 20th century. In 1930, for example, there were approximately 128,000 school districts in the United States serving 25.7 million public school students. In 1996, there were just 14,883 districts serving 45.7 million students. Between 1940 and 1990, the total number of public elementary schools decreased by 69%—from approximately 200,000 to 62,037—despite a 70% increase in the U.S. population. Even today, when many people—both experts and lay people—understand the damage that can be done to a community when it loses its school, closings still occur. The impetus for consolidation is now more often financial than curricular. In West Virginia, for example, 258 of the state's K-12 public schools, or 26%, closed between 1990 and 1998. Many of these closings were the result of a requirement by the state's School Building Authority that schools meet minimum size criteria before qualifying for construction funding.

Consolidation continues despite convincing evidence that 1) small school size is associated with lower high school dropout rates; 2) socio-economically disadvantaged students perform better in small schools; and 3) student participation is dramatically higher in small schools. Ironically, consolidation continues at the same time that large urban districts are becoming increasingly interested in creating schools-within-schools and other creative ways of forming smaller educational communities. "Large schools neither nourish the spirit nor educate the mind. ...Small school size is not only a good idea but an absolute prerequisite for qualitative change in deep-seated habits, not just in rhetoric," wrote Deborah Meier, co-director of a small school in New York City.

Organized community members often fight proposed consolidations, viewing the death of a school as tantamount to the death of their town. At least one national organization, the Annenberg Rural Challenge, actively advocates the need for small, community schools. In the Fall 1997 issue of the organization's newsletter, Marty Strange wrote, "The truth is, small schools provide an atmosphere where knowing and being

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1839	1840	1847
The first normal school (from the Latin norma, *meaning standard or rule) is established by Horace Mann in Lexington, Massachusetts It is the first of many teachers' institutes to open in the 1800s and Mann hopes the institutes will be linked closely to common schools.*	*25% of the adult population is illiterate.*	*The first "graded" classroom is started in Massachusetts, with grades established by ability. Age-level grading as we know it today will not be common practice until the early 1900s.*

known breed self-respect, encourage hard work, and allow for special attention." And those factors count for a lot, especially in the battle to overcome the effects of poverty and other socioeconomic disadvantages. As one small school's motto proudly proclaims: "What we lack in size, we gain in pride."

Rural Roadmaps

Rural schools and students rarely attract significant national attention, especially when compared to inner-city education. Think for example of the number of television shows or movies with a rural setting and theme as compared to those with an urban focus. This same phenomenon plays out in research as well, where rural education topics are largely overshadowed by their city counterparts.

In 1994, however, the Office of Educational Research and Improvement issued a major report: *The Condition of Education in Rural Schools*. This 140-page report details not only who attends these schools, who teaches in them, and who administers them, but it also explores the connections between rural poverty, the "health" of rural communities, and the effect of national reform policy on these schools. Although the report does not focus on gifted education, it is an important tool for those of us trying to gain the fullest sense of what is happening in our nation's small and rural schools. Another report published two years earlier by the Children's Defense Fund, *Falling by the Wayside: Children in Rural America*, is also a significant work. Its focus includes issues other than education (although one chapter is devoted to K-12 education), and it details the poverty in which many rural children live.

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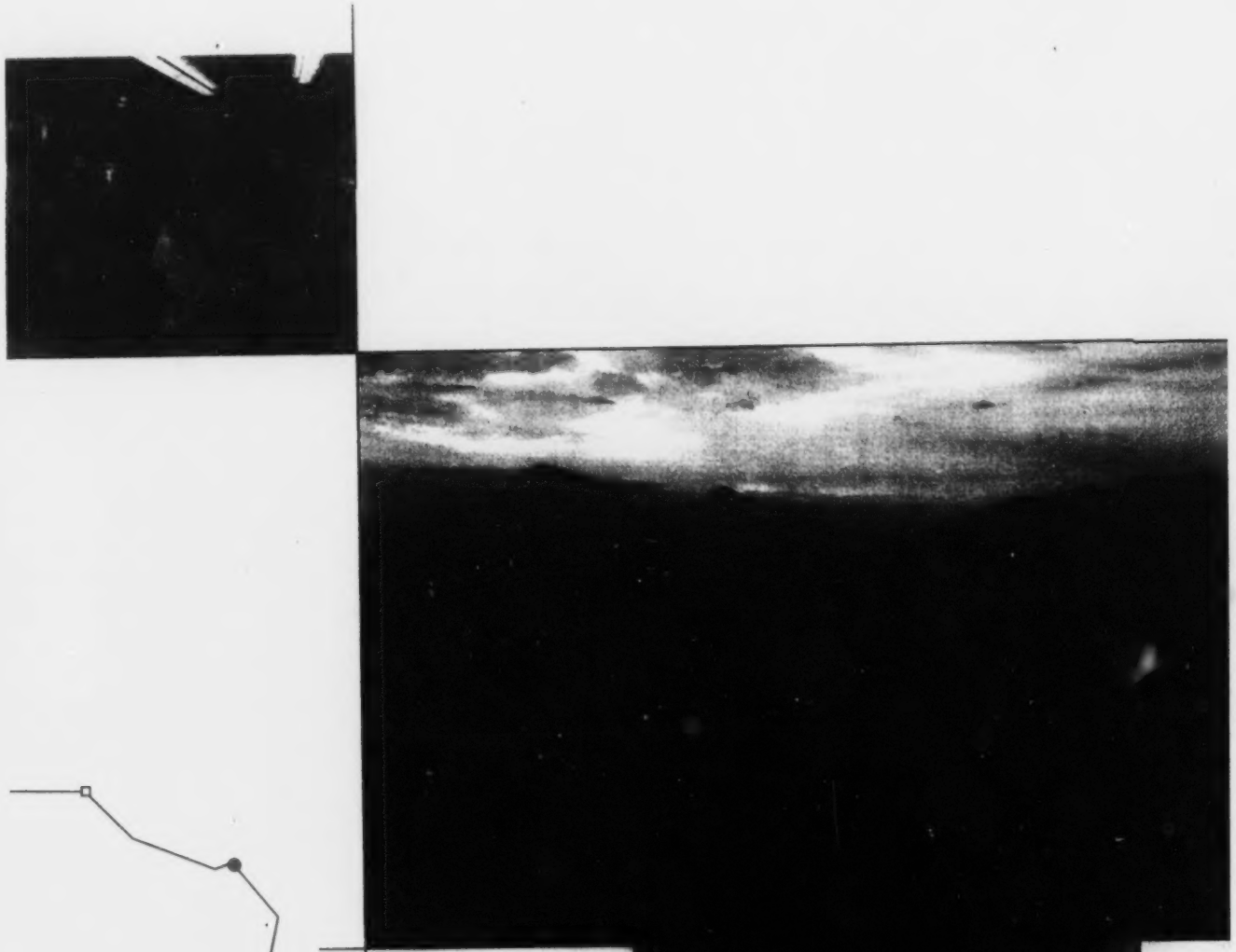
1852	1855	1855
Massachusetts passes the country's first compulsory school attendance law. By 1918, all states have passed a similar law.	*Brown University is one of the first universities in the country to offer education courses.*	*Henry Barnard, a Progressive, begins to publish the* American Journal of Education. *It is the most widely circulated, comprehensive, and influential educational journal of its day.*



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There is nothing

to be gained by

ignoring the needs

of gifted students.

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As with rural education, gifted education has experienced a see-saw effect of interest and disinterest on the part of the educational establishment. Whether gifted students are viewed as an invaluable commodity that should be well-funded and nourished, or as an elitist group draining money from other projects, there has often been a strong reaction to gifted education in the United States. Writing in 1976, one expert in the field, T. Ernest Newland, summarized nicely what a number of more recent researchers continue to believe: "Society's perceptions of the gifted have varied with the ways in which it perceives its needs."

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Simple Beginnings

For nearly the first 100 years of our country's history, organized gifted education was non-existent. The first efforts in this country to provide services specifically for academically advanced K-12 students came in the late 19th and early 20th centuries. St. Louis schools developed a tracking system in 1870 that allowed students to complete the first eight grades in less than the standard amount of time. Fourteen years later, the "Double Tillage Plan" was used in Woburn, Massachusetts allowing able students to accelerate directly into the second semester of 2nd grade. The first school especially designed for gifted children opened in Worcester, Massachusetts in 1901. And in 1916, several cities began to offer gifted classes. There is little or no record, however, of the fate of these early programs.

In the 1920s, the same standardization movement that had an overall ill-effect on rural schools was also unkind to the burgeoning gifted movement. Many critics view the era's move towards standardization as an attempt to equalize educational opportunity and attainment while not encouraging or supporting students to move beyond the established mark. In other words, mediocrity ruled the day. Gifted programs languished, and administrators largely believed that the students they had served could take care of themselves. The financial burden of the Great Depression further hindered any efforts to provide programming beyond the most minimal. At the same time, the schools were flooded with more students than ever before in an effort to keep young people out of the depleted job market, and schools struggled just to get them all through the system as efficiently as possible; it was not a climate for special services.

War, however, and the shortage of well-educated men worked in favor of gifted students. During World War II, several universities offered early-entrance programs. In 1943, the University of Chicago initiated a B.A. program for students who had completed an experimental general education curriculum begun after their sophomore year of high school. Eight years later, in response to the demand for manpower in the wake of the Korean war, the Ford Foundation started a similar program called the Fund for the Advancement of Education. Eleven participating universities accepted 1,350 early applicants between 1951 and 1954. Testing of the group showed that the "Scholars" outperformed the general college population and had no problems with socioemotional adjustment due to acceleration.

Raising the Bar

The publication of James Conant's 1959 study, *The American High School Today,* also affected both rural and gifted education. Whereas Conant's call for "comprehensive" high schools proved to be a death knell for many small schools, his recommendation for a

1860	1865	1868
During the next 40 years more than 14 million immigrants will arrive in the United States. Many of them move to cities, putting a stress on urban schools, which are increasingly viewed as a form of acculturation. Other immigrants move to farming communities throughout the Midwest and West.	*Four out of five Americans live in communities with fewer than 2,500 residents.*	*The St. Louis schools implement "The Saint Louis Plan," a system of flexible promotion.*

more rigorous program helped to bolster the efforts of advocates of the gifted. Furthermore, larger high schools with a greater population of top students and well-trained teachers were more able to offer advanced coursework.

What really spurred gifted education in the 1950s, however, was an event that occurred on the other side of the globe: the successful launching in 1957 of the Soviet satellite *Sputnik*. The United States lagged far behind the Soviets in aeronautical ingenuity at the time, and the launch of Sputnik underlined the shortcomings in American education, especially in math and science. Almost immediately an effort was made to identify and better educate the country's brightest students. Acceleration and ability grouping became much more prevalent, and college-level courses were more available in high schools. The amount of research on giftedness and creativity also increased dramatically, with the professional literature on the subject as much as tripling.

State Historical Society of Iowa

1950s "duck and cover" drill.

Unfortunately, much of the progress from the programming initiated during the Sputnik period eroded in the 1960s. The civil rights movement and attempts to alleviate the shortcomings of services to inner-city and minority youth dominated educational funding during this period. Gifted programs, which traditionally had not served many children of color, were condemned as discriminatory and were allowed to languish, as opposed to being expanded to serve a greater diversity of students.

Another backlash against gifted education came in the guise of campus riots. Especially in the case of the University of California-Berkeley in the early 1960s, students protested being viewed as raw material to be mined and shaped by the educational system. As Abraham Tannenbaum wrote in 1972, "Large numbers of gifted students resent being groomed to service the critical requirements of a state they consider guilty of aggression abroad and oppression at home." This notion of students as human resources, which was promoted in the 1983 *Nation At Risk* report, is much alive today and seems embedded in the American view of the purpose of education.

Trailblazers

Over the years, various research has served to increase the awareness of and interest in gifted education. Looking back to the 19th century, some of the first research into intelligence was carried out by Sir Francis Galton, a younger cousin to Charles Darwin. Galton is most remembered as the founder of the now obsolete science of eugenics. However, his work focusing on the link between heredity and intelligence was a benefit to early research on giftedness and creativity. Especially noteworthy was his 1869 book *Hereditary Genius*.

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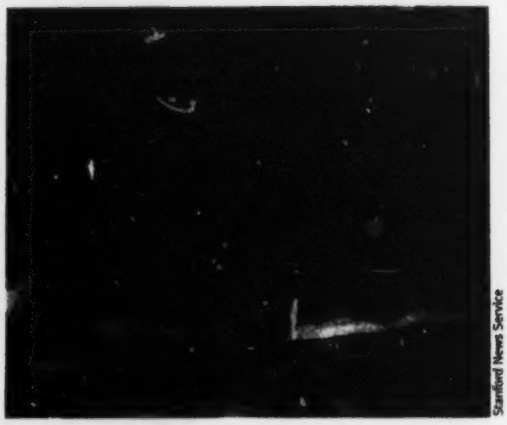
1869	1870	1873
Sir Francis Galton publishes Hereditary Genius.	*St. Louis schools develop the first tracking system in the country.*	*The kindergarten movement, led largely by Elizabeth Peabody (whose sisters Mary and Sophia were married, respectively, to Horace Mann and Nathanial Hawthorne) is in its first stages. There are now 12 kindergartens in the United States. Twenty-five years later, there will be 4,363.*

Although Galton set a course for later research into gifted education, Lewis Terman is the true father of the field. In 1921, Terman, a Stanford University psychologist, began a longitudinal study of 1,528 gifted youth. He administered the Stanford-Binet Intelligence test to all of the participants—a test that he had modified in 1916 from the previous Binet-Simon test, thus creating the world's most widely used and recognized intelligence test. The results of the longitudinal study appeared between 1925 and 1959 in the four-volume work *Genetic Studies of Genius*. Today, Terman's "kids" continue to be analyzed into their advanced years.



Lewis Terman

Terman's work was especially important in that it debunked many myths about giftedness. He showed, for example, that giftedness appears in all socioeconomic and racial-ethnic groups, and that extreme intelligence does not automatically lead to greatness and success but, rather, must be supported and nourished appropriately. Also, his research indicated that giftedness is associated with many positive non-intellective factors, thus dispelling the myth that abnormality is the price of giftedness.

Another researcher whose work indicated the need to support gifted students, especially emotionally, was Leta Hollingworth. Born in a dugout house in rural Nebraska and educated in a one-room log schoolhouse, she worked at Teacher's College at Columbia University from 1916 until her early death from cancer in 1939. She drew attention to the need for counseling of many gifted children, arguing that the greater the gift, the greater the need for "emotional education."

The leadership of Hollingworth was continued with the work of A. Harry Passow and his students, Abe Tannenbaum and Miriam Golderg. The Talented Youth Project, a comprehensive program started by Passow in 1954 and continued into the 1960s, was a predecessor to projects that are currently in vogue, especially those focusing on disadvantaged youth, undeveloped talent, and counseling.

The educator who has had the greatest impact on current gifted education programs in schools has been Joseph Renzulli. Renzulli's Enrichment Triad Model has fostered the notion of enrichment and a focus on products. Renuzlli's model has been very well received by administrators because it allows for a larger number of gifted students to be identified in schools. His concept of the talent pool has fostered identification based upon above-average ability, as opposed to exceptional ability. This concept allows for an administratively attractive program because of the relative ease in the identification of students and the increase in the number of students who can be served. The Renzulli model is tangible and behaviorally oriented; students have to "produce" in order to be served by a gifted program.

1874	1884	1886
Fewer than 2.5% of American youth attend high school.	*The "Double Tillage" plan in Massachusetts allows early elementary students to accelerate.*	*Sears & Roebuck is established. In the coming decades, the mail order company will be invaluable to rural families in need of affordable merchandise that is unavailable or overly expensive from local general stores.*

A LEG UP IN OKLAHOMA: PROJECT LEAP

During the 1920s there was an oil drilling bonanza in northeastern Oklahoma. Towns seemingly sprouted and doubled overnight. The town of Shidler boasted a population of more than 10,000 and, along with the surrounding area, was home to 23 schools. Now, some 70 years later, only the Shidler School is left. Its 238 students (K-12) live in a 437 square-mile radius of the school, meaning that there are .5 students per every mile. Relatively nearby (by Oklahoma standards) is the consolidated Woodland School District boasting 572 students. Unlike Shidler, Woodland Hill students do not yet have access to the Internet. Some bizarre quirks of rural living have kept technological progress just outside their reach. Five different phone companies operate in the district, which has two area codes. A call between the middle school and the high school is long distance.

These two districts are joined by some of the difficulties that isolated, rural communities without a booming economy often experience. Along with two other districts, they are learning to overcome such odds while also working to serve and appreciate their communities' heritage. Project LEAP (Leadership, Excellence, Achievement, and Performance) is a three-year program started through a Jacob K. Javits Gifted & Talented Students Educational Grant in 1996. The four districts have worked together through the Osage County Interlocal Cooperative in order to establish a model program for gifted and talented students, especially those who are economically disadvantaged and Native American. A report written by LEAP's coordinators notes that the average Native American population for the four districts is 54%. In addition, 62% of all students qualify for free and reduced lunch benefits.

The project's leadership curriculum is based on six areas of study: research skills, with an emphasis on technology and learning styles; writing skills; motivation/self-esteem, including student-initiated community service projects, such as car seat safety checks and home smoke detector installation; pre-college orientation; career education; and Native American heritage, emphasizing avenues for positive cultural identity. The educators working with the students are all of Native American descent and are familiar with the communities in which they live and work. More than 100 students have been identified and served by Project LEAP, which also has a strong parent-education component.

The most powerful model is the Talent Search Model which has effectively identified hundreds of thousands of students each year and has allowed for programming for these students. Founded by Julian Stanley in the early 1970s, this model has been the basis of university-based programs focusing on the development of specific academic talents. The identification of students via the Talent Search Model is based on the use of standardized tests. Typically, participants are given above-level tests (a method established

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1889	1889	1891	1894
Jane Addams (1860-1935) founds Hull House, a settlement house in Chicago providing welfare services for the poor and recent immigrants.	*Columbia Teachers College is established.*	*Cambridge, Massachusetts implements the Double Track Plan in which classes could cover six years of work in four years.*	*John Dewey (1858-1952) opens the Lab School at the University of Chicago. The school's motto is "learning by doing." He is responsible for a shift to student-centered education.*

Leta Hollingworth

by Leta Hollingworth); for example, 4th graders take a 6th-grade mathematics test. After students are identified, the types of classes and programs that they take are based on acceleration and acceleration interventions that have the strongest and most positive research support.

In the 1980s, Robert Sternberg introduced his Triarchic Theory of Intelligence, greatly expanding the concept of giftedness beyond that of the Intelligence Quotient (IQ). Sternberg's model is based on the theory that intellectual giftedness is not a unitary entity but is rather composed of separate components. Sternberg has proposed three components of intellectual giftedness: (a) analytic giftedness, which refers to the ability to dissect a problem and understand its parts—this ability is typically measured by standardized academic tests; (b) synthetic giftedness, which is seen in individuals who are intuitive, insightful, creative, and adept at novel situations; and (c) practical giftedness, which involves the application of analytic or synthetic ability to everyday pragmatic situations.

Currently, the most influential individual in broadening our perspective of intelligence is Harvard psychologist Howard Gardner. It was not Gardner's original intention to establish a theory of giftedness that would be useful in educational settings; it is therefore ironic that his name is probably better known by educators and lay people alike than any of the previously mentioned individuals. Gardner's 1983 best-selling book, *Frames of Mind,* has been a catalyst among gifted educators for re-thinking domain-specific talents. His theory of intelligence distinguishes seven independent intelligences: linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal. More recently, he has proposed an eighth intelligence: the naturalist. According to Gardner's followers, each of the intelligences is important to learning and should be reflected in teaching methods, although linguistic and logical-mathematical are the intelligences most commonly valued and addressed in traditional school settings. Gardner's theory is strongly appealing to educators because it has the potential to include a greater number of students with a broader range of talents.

The above discussion has focused on the cognitive domain of giftedness. The affective area is also important to the field, even though it seems to have played a secondary role in relation to the cognitive arena. Hollingworth's work was pioneering in its emphasis on affective issues. Following in her path were others from Columbia Teachers College and the University of Wisconsin, where John Rothney established the Counseling Laboratory for Superior Students in 1957. His work provided the foundation for others who have focused on affective and career counseling needs, including Nicholas Colangelo, Michael Piechowski, Linda Silverman, Barbara Kerr, James Webb, and James

Early 1900s	1900	1901
The efficiency movement is popular in schools. Administrations are streamlined to fit business models. Achievement tests, checklists, teacher assessments, and other forms of quantifying education become widespread.	*U.S. population = 76.1 million Children in public schools = 15.5 million*	*The first school especially for gifted students opens in Worcester, Massachusetts.*

Delisle. Piechowski, for example, is a leading scholar of the emotional development of gifted individuals. He has done much to bring Dabrowski's Theory of Positive Disintegration, a unique theory that focuses on the emotional development of gifted children and adults, into the educational arena. The recent publication of Daniel Goleman's book, *Emotional Intelligence*, has also given increased exposure to the importance of non-cognitive factors in academic settings.

Setting a Course

In the latter half of the 20th century, a series of national reports impacted views about and support for gifted education. In 1972, in response to a Congressional mandate, the U.S. Commissioner of Education, S.P. Marland, issued *Education of the Gifted and Talented*. Commonly referred to as the Marland Report, its most lasting contribution to gifted education has been to establish a national definition of giftedness that is still used today. (A modified and extended definition offered by Joseph Renzulli in 1978, however, has eclipsed it.) The effects of the Marland Report were nearly immediate and are ongoing today. Not only was funding and programming increased soon after publication of the Marland Report, but a federal office for gifted education was established. Many states have turned to the Marland definition for guidance in establishing standards and benchmarks for gifted education.

In 1983, the watershed *A Nation At Risk* report served as a wake-up call to American education. Although its focus was not specifically on the gifted, its effect was similar to that of Sputnik a generation earlier. The overall message was that American education was woefully inadequate and was quickly being overshadowed by superior educational systems in other countries. "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today," stated the report, "we might well have viewed it as an act of war." It went on to call for more rigorous standards and improved teacher training, among other remedies.

Despite the widespread attention drawn by the report, the Reagan administration, which had been responsible for its publication, was simultaneously engaged in withdrawing funding for many educational programs, including those for the gifted. In 1981, for example, the newly established federal office for gifted education was dismantled.

Appearing a decade later was *National Excellence: A Case for Developing America's Talent*. Produced by the Office of Educational Research and Improvement in 1993, the report called attention not only to the lack of challenge faced by many American students, but especially to the lack of educational opportunities available to "economically

The Marland Definition: Public Law 91-230 (or, the six kinds of giftedness as described by the Marland Report)

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual and performing arts ability
6. psychomotor ability*

It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of 3 to 5% of the school population.

*[illegible]

1904	1905	1908
Charles Spearman proposes a general capacity of mind, which he called "General Intelligence," or the "G" Factor.	*Simon and Binet publish their first intelligence test in Paris, France.*	*The National Commission on Rural Life is formed to study, among other issues, "the rural school problem."*

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disadvantaged and minority students." It went on to recommend across-the-board improvements in curriculum standards, a broader definition of "gifted," and increased services for disadvantaged and minority students.

In contrast to the Marland Report, however, *National Excellence* lacked strong political support. Secretary of Education Richard Riley contributed only a foreword to the later document, whereas his predecessor, Marland, had served as the sole author. In addition, while the Marland Report was mandated by Congress, *National Excellence* had no specific audience. It offered a new definition of gifted, tending toward the concept of "talent," and it justified having different standards for giftedness for different schools and communities. Overall, however, many in the field found the report to be overly vague, and it has not been popularly adopted. Its effects have been significantly smaller than those of the Marland Report. As one educational journal noted, "While improving gifted and talented education was made a national priority by the U.S. Department of Education in 1993 [with publication of the report], actually doing something about it appears to be a difficult, controversial, and slow process."

A Crossroads

Similar to rural education, gifted education has not always benefited from reform policies. Notably, the recent move towards de-tracking (abolishing accelerated and advanced courses) and the increased use of cooperative learning have been considered hindrances to gifted students by many experts in the field.

These trends have been coupled with the ever-present American concern regarding equity and elitism. In their attempts to give everyone a fair chance, or to "level the playing field," American schools are often guilty of ignoring the talents and needs of the most able students. Some critics go so far as to argue that American schools are markedly anti-intellectual. In their book *Out of Our Minds*, Craig Howley, Aimee Howley, and Edwina Pendarvis say that "the dark side of society's commitment to provide everyone with a standard, functional schooling…[is] the destruction of talent, and not only (or even principally) among the gifted." Gifted students are expected to succeed, whatever the obstacles, without the benefits of "special" help. They, along with their parents and teachers, are often accused of being elitist and of competing for resources with students who are perceived to have greater needs.

The ambivalence towards gifted education has been reflected in the vicissitudes of responses to the education of gifted children. Currently, there is a growing recognition of the academic and social needs of gifted students; this change is due in part to the increase in information available to both educators and the general public over the past 30 years regarding the legitimate needs of gifted students.

1910	1913	1916	1916
U.S. population = 92.4 million Children in public schools = 17.8 million	*Half of all school children attend one-room school houses.*	*Several cities, including Los Angeles and Cincinnati, begin to offer classes for gifted students.*	*Lewis Terman publishes the Stanford-Binet test.*

Two current trends also contribute to a more "balanced" view of gifted students. One is the number of voices clamoring for increased rigor in the K-12 curriculum, a curriculum that has been deemed underchallenging by a wide range of experts. The recognition of these deficiencies makes it intuitively obvious that students of high ability must be "losing out" if the curriculum is not even sufficiently rigorous for the general population. The other trend has involved a number of international comparisons (e.g., TIMSS) resulting in sobering reports that America's students do not match well with students in other countries. This has led to the perception that we may have short-changed some of our top students.

As we enter the new millennium, the public is beginning to realize that there is nothing to be gained by ignoring the needs of gifted students. There is greater acceptance that many of these needs can be met in school settings without jeopardizing the education of other students. In addition, it is being recognized that efforts on behalf of gifted students can actually improve the curriculum as a whole, which contradicts the notion that by fostering the needs of gifted students we abandon general students to a "lower-track" curriculum. With regard to gifted students in rural schools, there is more awareness and a greater commitment to not let the "luck" of geography dictate the opportunities to identify and enhance talent.

Historically, gifted education has been sabotaged by myths and stereotypes, e.g., gifted kids are generally social isolates. Many of these myths have been dispelled; however, two new general myths are emerging:

1. **Raising the general level of the curriculum will address the needs of the gifted, and, therefore, there will not be a need for special programs.** Whereas it is true that improving the curriculum for all students will improve the plight of the gifted student, general improvements will not by any means address the specific individual cognitive and affective learning needs of gifted students. These needs have now been well documented.
2. **Technology will "equalize" opportunities for the gifted, especially those in rural schools.** Technology will play an ever-increasingly large role in the lives of all people. It will clearly enhance quantitative and qualitative opportunities for gifted students, and gifted students in rural schools may especially benefit from its impact. However, technology cannot serve as a substitute for peer interaction and collective work. Rather, it can play only a limited role in providing for the affective needs of gifted students in rural areas.

It will be important to be vigilant in our thinking and not be convinced that general improvements are equivalent to comprehensive programs.

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1920s	1920	1922	1925
Progressive Education Movement takes hold and developmental concerns become a focus.	*U.S. population = 106.5 million Children in public schools = 21.6 million.*	*Leta Hollingworth establishes a school for gifted students in New York City that will eventually be known as the Speyer School project.*	*Lewis Terman publishes the first of four volumes of* Genetic Studies of Genius, *the first longitudinal study of giftedness.*

Despite years of consolidation, there is still an immense number of small schools nationwide. Within each of these buildings, there may be one administrator, one teacher, and at least one student struggling with the issues of giftedness.

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Unlike the comprehensive reports and histories that have been written about both gifted and rural education, respectively, there are no such roadmaps for us to follow on the topic of how our most academically able and talented students are being served by America's small and rural schools. Relatively little has been written on the combined topics. In 1976, J. Ernest Newland wrote that the condition of the gifted in rural areas "seems to have been little studied." He proceeded to allot one chapter to the obstacles in providing challenge to gifted students of rural areas and outlined some alternatives. Almost two decades later, Jane Piirto also briefly addressed the needs of rural and gifted youth, very much echoing the observations of Newland, her earlier colleague; the only significant difference between the two is the increased attention by the latter author given to technology as a potential delivery system.

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Indeed, technology is one of the two main themes that reoccurs in articles addressing the gifted in rural areas. Increasingly, authors are interested in describing methods of delivering advanced materials to isolated gifted students via the Internet, teleconferencing, or other means. The other common theme falls under the heading of a profile article—that is an article outlining the challenges that face both gifted students and those adults involved in their education, often focusing on the progress of an individual or program.

With regard to the technology-centered article, the ideas therein are often quickly outdated just like the programs and hardware they describe. Although technology in general is increasingly a popular method for serving rural gifted students, the various methods for transmitting information and coursework are ever-changing, creating a unique set of challenges.[1] The fast-paced nature of technological change, including the spread of the Internet and the advancement of hardware, makes the use of technology a difficult topic to cover in any writing that will have more than a year's staying power.

'In some critics' minds, the rapid turnover of software programs and new hardware for delivery make technology a poor method by which to bolster rural education. As Craig B. Howley and Aimee Howley observed in a recent article:

...it is already becoming clear that rural schools typically (though not always) lack the infrastructure and resources to offer all students the sorts of tools touted as 21st-century miracles (World Wide Web browsers, CD-ROM databases on local area networks, and so on). Basic connectivity is, at present, the main impediment. Rural schools are not even served by 56 Kb lines, they cannot afford to install them, and they cannot afford to equip classrooms. They are behind on building maintenance and replacement, and computers and in-service training are additional expenses. Solutions to such problems exist in some communities, but the facilitating circumstances (e.g., good relationships among agencies, leadership to coordinate the effort, consistent funding) are comparatively rare.

The issue of timeliness also affects the second group of articles, those that profile specific programs. As one researcher who tried to contact gifted programs that had been mentioned in an earlier report on gifted education has described, "None of the respondents had anything to report. Every school had long since dropped its programs, usually because the key people responsible for inspiring and directing them had long since departed from the scene, as had the funds needed for the extra support."

That researcher, professor Abraham Tannenbaum, was writing in 1972, but the phenomenon he described is alive and well today. Many profile-style articles that were found in research for this project described programs or situations that have since become defunct. Despite sounding wonderful in print, a series of phone calls would eventually establish that a program was no longer operating. Often, it was difficult to even locate a person who had been involved with the program or who had any knowledge of it. The result of this phenomenon is that there are relatively few ongoing models of successful programming for rural gifted students.

Another limitation of these articles is that they tend to be written for people with either a strong knowledge base in either gifted education or rural education, but not in both. The point of the articles is usually to bring one audience up to speed on some of the more commonly understood methods or principles of the other area. For example, a 1987 article in *Gifted Child Quarterly*, "The Rural Gifted Child," uses most of its word count to describe the conditions of both rural living and small schools. The authors provide a definition of *rural*, examine rural poverty, and discuss the challenge of effectively identifying gifted students in rural areas. Many of the article's observations, (e.g., "The acceptance of the status quo and resistance to change [by rural inhabitants]

1930	1930s	1935
U.S. population = 123.1 million Children in public schools = 25.7 million	*The Great Depression and the scarcity of jobs contribute to the passage of mandatory schooling legislation. Fewer young people are working and more are in school than ever before.*	*The Iowa Every Pupil Test (later called the* Iowa Tests of Basic Skills*) is first published.*

make it difficult to initiate new offerings for the special needs of gifted students.") would probably be met with little interest, or even derision, by rural educators.

Likewise, an article published in the Winter 1989-90 issue of *Rural Educator*, "Planning a Gifted Program," does not take into consideration any possible differences between urban and rural gifted students. Rather, it provides an introduction to gifted education practices to a readership first and foremost interested in rural education. And, similar to the previous article, it offers no new knowledge to anyone with a basic exposure to gifted issues and methodologies.

The result of this phenomenon is that very little information of any depth is published regarding rural and gifted education. The book *Recommended Practices in Gifted Education* makes the following recommendations for further research into gifted education in rural areas: program evaluations highlighting those components that are more effective for rural programs; investigation of assumptions about rural gifted youth; study of the availability of and access to resources by these students; evaluation of student outcome variables, "especially with regard to an important consideration: Does gifted education serve rural communities or create a 'brain drain'?"

We concur with all of these recommendations. The Belin-Blank Center intends to become a clearinghouse for such studies and statistics regarding the status of rural gifted youth. As our review of the literature proves, there has been a need for such a service for some time.

MAKING DISCOVERIES IN NORTH CAROLINA: CLARKTON SCHOOL OF DISCOVERY

"I've been in education for 19 years," says Jim Coleman, "and my time with the Clarkton School of Discovery has been by far the most exciting." Coleman is the principal of a unique magnet school that serves rural Bladen County in North Carolina. The middle school is open to all students in the county but has a special program within the school called Project Challenge that is especially for gifted and talented students.

Like all students at Clarkton School of Discovery, the gifted and talented students spend their mornings working on core courses. (They work entirely with teachers certified in gifted education.) Afternoons are reserved for elective classes in which Project Challenge students participate side by side with other Clarkton classmates. Every quarter, students sign up for new electives, some of which are deemed "core-related" and others of which are "enrichment/exploratory." Class subjects range from regional ghost stories to environmental science to mime.

The school, which opened its doors in 1994, is built on the theory that practices commonly applied to gifted and talented students can benefit all children. In 1997-98, the school had about 790 students, nearly 90% of whom were part of Project Challenge. The school has been so popular that some students travel by school bus for nearly two hours in order to attend.

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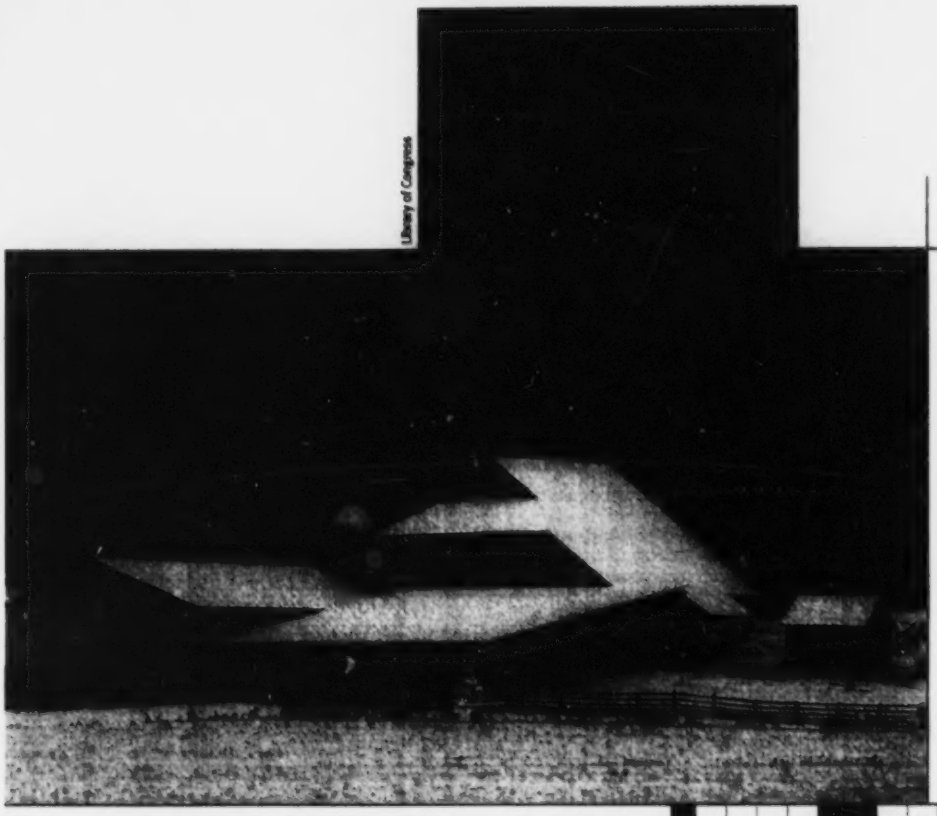
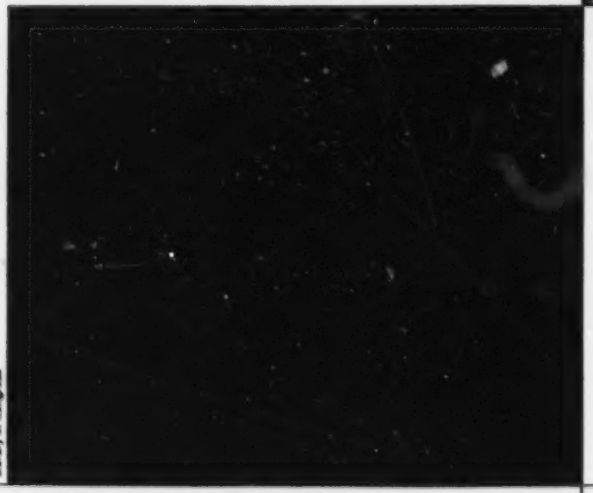


Few issues bedevil analysts and planners concerned with rural education more than the question of what actually constitutes "rural."

— The Condition of Education in Rural Schools (1994)



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Establishing a definition of *rural* sounds simple enough. We have found it, however, to be the most complicated task of this report. Most reports on rural subjects contain an explanation of how the authors have grappled with this definition. Even the federal government and its myriad of offices—to which we turned for precedence—does not use a single definition. Rather, respective federal offices use multiple meanings and often eschew the term altogether in favor of the less precise *nonmetropolitan*. Instead of defining what rural is, this all-too-convenient latter term lumps together everything it is *not*. Thus, our frustration over the elusive nature of this word puts us in good company.

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Figure 1
ERS county types

Metropolitan:
Central counties of metropolitan areas of 1 million population or more

Fringe counties of metropolitan areas of 1 million population or more

Counties in metropolitan areas of 250,000 to 1,000,000 population

Counties in metropolitan areas of less than 250,000 population

Nonmetropolitan:
Urban population of 20,000 or more, adjacent to a metropolitan area

Urban population of 20,000 or more, not adjacent to a metropolitan area

Urban population of 2,500 to 19,999, adjacent to a metropolitan area

Urban population of 2,500 to 19,999, not adjacent to a metropolitan area

Completely rural (no places of 2,500 or more population) adjacent to a metropolitan area

Completely rural, not adjacent to a metropolitan area

A search in a thesaurus brings forth either saccharine images of calico dresses and harvest time (e.g., *pastoral, bucolic*) or negative terms that reflect an overall dim view of life outside the city (e.g., *unsophisticated, crude*). As represented by *The American Heritage College Dictionary's* entry, one common element in the definition of rural is that it is "of the country" and "relating to farming; agriculture." While the word commonly connotes a tractor in a field, equally deserving of the moniker are New England's fishing villages, logging towns of the Pacific Northwest, and the Southwest's desert region populated by American Indian reservations and Mexican-American communities. Each of these is a rural area, albeit non-farming in nature. Each plays a significant role in our national heritage.

Federal Definitions

Among the federal offices that have definitions of *rural*, the Census Bureau's two definitions are among the most commonly used. In its decennial survey, the Bureau defines *rural* as a residual category of places "outside urbanized areas in open country, or in communities with less than 2,500 inhabitants," with a population density of "less than 1,000 inhabitants per square mile." In its monthly household sample surveys, however, the Census Bureau uses the term *nonmetropolitan* instead of *rural*. *Nonmetropolitan* refers to counties "outside of, or not integrated with, large population concentrations of 50,000 or more."

Another federal office, the Economic Research Service (ERS) of the U.S. Department of Agriculture organizes its classification by counties. There are 10 ERS categories, ranging from the central areas of very large cities at 0, to "completely rural" areas that are not adjacent to any sort of town or city at 9 [Figure 1]. According to *The Condition of Education in Rural Schools,* which has a thorough chapter concerning the definition and characteristics of rural schools, all 10 types of counties have rural schools. For example, 12% of the schools in metropolitan areas (0 to 3 on the ERS scale) are in rural places. By contrast, however, there are no metropolitan schools in counties classified as 9.

The National Center for Education Statistics (NCES) provides yet another definition and perhaps the one most relevant to education researchers. Differentiating by community type, the NCES has a five-level chart moving from central city to rural [Figure 2]. Each community type is defined, in part, by its relation to a metropolitan statistical area. According to the NCES, a metropolitan statistical area is "a large population nucleus and the nearby communities which have a high degree of economic and social integration with that nucleus."

Figure 2
NCES community types

Central City	A city with a population of 50,000 or more that is a central city of a Metropolitan Statistical Area (MSA)
Urban fringe	An area within an MSA of a central city and defined as urban by the Bureau of the Census but which does not qualify as a city.
Large town	A town not within an MSA, having a population of 25,000 or more.
Small town	A town not within an MSA, having a population between 2,500 and 24,999.
Rural	Not in any of the above categories.

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RURAL: A CONCEPT IN TRANSITION

It may be the Southwest ear or some remnant of a speech impairment I carry, but I find that not many people hear and understand me when I say "rural." "World?" they ask. "Whirl?" No, I explain, rural—as in "out in the country."

I have learned that many people from out in the country have a shortage of rural pride and rural self-awareness; they simply see themselves as "not urban," "not suburban." Little communities are "out there"—say, 200 miles west of San Antonio. Defining yourself by what you are not creates a vacuum in a community. But beyond that, and for many reasons, I sense a growing feeling that "rural" may be too pure a word for many people's experience of the part of the country where they find themselves. Some rural areas are changing quickly. I ask myself every day, is this rural?

In Oklahoma, for example, I visited a district perched on a busy two-lane highway. Everybody seemed to be going somewhere else in a hurry. In honor of my visit the superintendent went down to the little grocery at the side of the road and asked if anyone knew how the settlement got its name. Someone thought it was named after a woman, but no one was quite sure. Everyone I met at the community meeting had moved there from somewhere else, most often to retire.

In Texas I visited a district where almost all the parents commute at least 45 minutes to jobs in a plastics factory in a small city on the interstate. People thought long and hard before they could name a family that still earns a living from agriculture. Just 10 years ago, they told me, most families farmed at least enough to contribute substantially to the family's income. Only a few of the teachers live in this district.

Rural means something slightly different when the children attending the schools are not from the surrounding country.

Shifts in the economic base have eaten away at the identity and cohesiveness of many rural areas. In one central Texas county all five school districts were staying open, if not thriving, due to a boom in the foster care business. Unable to support themselves, former ranch families were now selling home care in a safer white middle-class environment for hundreds of foster children sent from Dallas and Houston. Foster children made up more than 25% of one district's enrollment.

For such places "rural" is less reality than it is heritage, in the sense that Navajo speak of their language as a heritage language—ignored, forgotten, and not handed down through generations. Rural means something slightly different when the children attending the schools are not from the surrounding country, or when their parents are recent ex-urbanites who work and shop in cities. Or when none of the teachers or administrators grew up there or live there.

Where do you start when no one seems to know much about the place—its history, ecology, culture? I have come to believe that you start from where you are with people who have the capacity and desire to learn. You have to reclaim the knowledge of the place.

This is excerpted from an article by Belle Zars that appeared in the Rural Challenge newsletter, ruralmatters, *Winter 1998. It is reprinted with permission of both the author and the Rural Challenge. Zars wrote this while working as a Rural Challenge steward in several southern states.*

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Developing an Operational Definition

As Daryl Hobbs has commented, "The term nonmetropolitan is a residual; it is what is left over after the metropolitan areas have been taken out. ...The concept of rurality once had significant economic, social, and political associations, but the nonmetropolitan concept that replaced it is primarily, though perhaps not totally, geographic." We are interested in that more traditional, i.e., non-residual, "concept of rurality." We believe that this concept still has currency. In trying to tool an operational definition, we have sought one that is as pliable and inclusive as possible, allowing us to investigate the nature of schools in a variety of rural settings, each with its own unique economic, social, and political characteristics.

It is important to remember that each of the four previous definitions was developed to fit the specific needs and purposes of the respective governmental offices, e.g., NCES. They also reflect the considerable resources available to such offices for data collection. For the purpose of this study, we were faced with the dilemma of generating a working definition that would allow us first and foremost to collect information from state departments of education and rural education organizations. Inquiries to several states around the country quickly proved that few, if any, departments of education use the above federal definitions for their own statistical collection. Rather, they most often collect and organize information by *school district size.* Many states have their own size categories by which they separate their districts. Such categories, running from smallest to largest, roughly correspond to rural and urban designations. While rural areas are composed mostly of small-sized districts, urban areas sometimes have small-sized districts as well. The latter, however, are not our focus at present.

For the purposes of our initial study, we decided to examine school districts with 2,000 or fewer students, deeming these "rural and small schools." This definition has the advantage of being relatively useful and uncomplicated for data collection, allowing us to survey all 50 state departments of education. [See Appendix A for surveys and procedures.] By excluding distance from a metropolitan area as part of the definition, we were also able to be more encompassing. If anything, our definition errs on the side of including districts that may not be severely isolated or lacking in resources. This is in keeping with the philosophy of the Belin-Blank Center; we do not have a single definition for giftedness, finding it limiting to do so. Similarly, we are more interested in capturing the spirit of rurality than in pigeon-holing it with a narrow definition.

1938	1940	1940	1942
L. L. Thurstone used the statistical technique of factor analysis to establish seven factors of intelligence.	*U.S. population = 132.1 million Children in public schools = 25.4 million*	*There are 117,108 school districts in the U.S.*	*Leta Hollingworth publishes her book* Children Above 180 IQ.

BREATHE EASY IN IOWA: THE ENVIRONMENTAL HEALTH SCIENCES INSTITUTE FOR RURAL YOUTH

Come see the Inhalation Toxicology Facility! Learn about Pulmonary Biology! Discover Immunogenetics! These are just some of the topics that students in the Environmental Health Sciences Institute for Rural Youth will encounter during their one-week of study on The University of Iowa campus. This program, a partnership between the Belin-Blank Center and the University's Environmental Health Sciences Research Center is designed for gifted youth from Iowa communities of 2,500 or less. The residential program exposes students to issues, research, and problem-solving approaches dealing with the environment, agricultural occupations, and human health in rural areas of the state.

One of the program's originators, Dr. James Merchant, says, "The fact that these high school students are from rural communities is particularly important because they have a special stake in agricultural and rural environmental issues." The students, all of whom are between their freshmen and sophomore years in high school, develop presentations about some aspect of environmental health to present to both a community group and a school group when they return home. Project coordinators say that the growth they've witnessed in students during the week of on-campus study and during their hometown presentations has been impressive.

One complication in using a district-based definition is that districts are not determined nationally but rather state-by-state, with many different systems. *The Condition of Education in Rural Schools* notes that, "While nearly all rural districts have fewer than 2,500 students, the pattern is divided geographically. In New England and the Mountain states, nearly 70% of the rural districts have fewer than 300 students. In the Mid-Atlantic and Midwest, about 20% of the districts are that small; most have enrollments between 300 and 2,500. In the southern regions, where many states organize school districts along county boundaries, districts with under 300 students are rare. There, districts with 300 to 2,500 students are most common, and about one of three rural districts have enrollments exceeding 2,500 students."

This difference is well illustrated by comparing Florida and Oklahoma. Although Florida has nearly twice as many students as Oklahoma, it has just 67 school districts, with only four of them falling under the 2,000 mark. By contrast, Oklahoma has a total of 548 districts, and 495 of those have fewer than 2,000 students.

Despite the fact that not every state neatly fits the less-than-2000 rule as it corresponds to rurality, we believe that we've captured the essence of rural for the purpose of this report. Specifically, we want to describe the educational topography, emphasizing how giftedness is served in rural areas.

SOURCES FOR THIS SECTION:

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1950	1951	1954	1954
U.S. population = 152.3 million Children in public schools = 25.1 million	*The American Association for Gifted Children publishes* The Gifted Child *by Paul Witty.*	*Brown v. Board of Education begins the process of desegregation in American schools.*	*The National Association for Gifted children is established.*

Although poverty's hold on rural America has gradually loosened during the last century, rural children continue to bear the brunt of existing economic difficulties.

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Many analysts have commented on how the cultural gap between rural and metropolitan areas has diminished as a result of such factors as commuting, cable television, and regional shopping malls. Still, schools in rural areas possess some unique qualities. For example, they are relatively isolated, situated geographically far apart from resources such as cultural centers, universities, large libraries, and even other schools. Teachers in these areas don't have ready access to institutions that would allow them to augment their training, nor are materials near at hand to research or expand curriculum. Students have less exposure to a range of professions than their suburban peers. Being part of small classes also limits the chance that a student with special needs will have a classmate with similar aptitude or interests.

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Demographics

Many facets of rural life impinge on schools. In terms of demographics, the number of people who live in rural areas has been shrinking since the last century. During the Civil War, for example, four of five Americans lived in communities of 2,500 or less. Today, just over three-quarters of the population lives in metro areas, and fewer than one-fourth lives in rural places.

Another imbalance exists within the rural population itself, this one in terms of age. The number of working adults and children is proportionally smaller in rural areas, while the rural elderly population is increasing. This is partly a result of the increase in the number of retirement communities, a number that will only continue to grow as the Baby Boom generation ages. The equation of a shrinking population on one end of the age spectrum and a growing one on the other end does not bode well for rural schools, since education funds are often linked to enrollment, and older voters are not always avid supporters of education. In addition, recently arrived retirees are even less vested in local schools, having no personal memories of or connections to the schools via their own experiences or through those of children and grandchildren.

Economics

The economies of rural communities also impact schools. No longer based on agriculture or other natural resources, such as timber or oil, rural economies have been radically altered after decades of little change. In the 1990s, for example, farming employed fewer than 1 in 10 rural workers; at the same time, the manufacturing and service industries have expanded significantly in rural locales. We can no longer make assumptions about the income of a rural community, and yet to understand the condition of a community's schools and its children we must determine the income base of that community. According to Daryl Hobbs, "A community's economic base affects its social organization, social class structure, demographic composition, leadership, wealth, and more." And all of this affects children and the schools.

One thing that hasn't changed for rural economies is that they remain dependent on a single industry, although the industry may have shifted from mining to manufacturing, or from fishing to retirement service. Any study of an industry that goes from boom to bust illustrates the devastating effects that a lack of economic diversity can have on a community. Take, for example, the bleak depression that surrounded many small communities in the Midwest following the farm crisis of the 1980s, or the widespread unemployment that hit parts of the Northwest after environmental concern triggered cutbacks in the timber industry in the early 1990s.

1956	1957	1958	1958
J.P. Guilford delivers the American Psychological Association (APA) Presidential address and focuses on the importance of the study of creativity.	*The Soviet satellite Sputnik is launched, triggering increased attention to American education.*	*The National Defense Education Act (PL 85-864) is enacted to support the development of talent especially in math and science.*	*The Association for the Gifted, an affiliate of the Council for Exceptional Children (CEC) is established.*

LIFELONG FRIENDS IN WILLA CATHER COUNTRY: THE SUMMER HONORS PROGRAM

"Certainly my longest lasting friendships came about from the Summer Honors Program," recalls Marc Loy in an email to the authors of this report. "Here was a collection of 60 students interested in learning. That was a tremendous boost to my self-esteem." Loy, who now owns a computer training company, says that he was often bored in regular school and tried to help other students as often as possible in order to give himself something to do. The Summer Honors Program (SHP), however, allowed him to see a world outside his hometown of Alma, Nebraska (pop. 1,300).

Started in 1978 by the Educational Service Unit #11 in Holdrege, Nebraska, SHP was triggered by research indicating that rural students were at a disadvantage when entering college as compared to their suburban and urban peers. Since all of the districts served by the Service Unit are small and rural, with the largest district having 1,100 students today, the program made sense. SHP brings master teachers from across the country to Holdrege, says the program's director Tim Burke, so that students are exposed to as many expert teachers and geographic backgrounds as possible. Students are selected for the program after being nominated by their high school teachers. Once in Holdrege, they cover about a semester's worth of work in two weeks.

While providing gifted students from rural communities with opportunities for advanced study is one of SHP's primary goals, another one is equally as important: To bring together students with similar interests and concerns. The peer group established among SHP participants and graduates is significant. It is bolstered by the fact that many students enroll in the program for several years during their high school career and try to maintain contact during the academic year (a task made easier by email). Mike Lewis, who grew up in Beaver City, a town of 700, and who now works for the Nebraska Legislature, says, "Most of my best friends today are people I met at SHP. There was an atmosphere in which your social status was determined by how interested you were in learning and how creative you were." While Lewis greatly values his small school/small town experience, he does so with a caveat: "Of course I was lucky to have SHP. Most rural kids in this country don't have such an opportunity."

Although poverty's hold on rural America has gradually loosened during the last century, rural children continue to bear the brunt of existing economic difficulties. And every farm crisis or timber cutback is especially hard on this segment of the population. In 1993, for example, more than one-third of the rural Americans who were in poverty were children under the age of 18.

This poverty in rural areas is due in part to the instability of employment in these areas, a situation that is not significantly better than that found in many inner-cities. Although overall unemployment is lower in rural areas than in inner-cities, jobs are often short-term, seasonal, and part-time in nature. Such work not only undermines stability, it also limits a family's benefits, including health insurance for children, access to

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1959	1960s	1960	1962
James Conant's pro-consolidation study The American High School Today *is published.*	*Little focus is given to gifted education during periods of civil rights expansion and the Viet Nam war.*	*U.S. population = 180.7 million Children in public schools = 36.1 million*	*Project Talent is established at Columbia University under the direction of Harry Passow*

unemployment compensation, and retraining programs. As with inner-cities, the jobs that exist in rural locales are usually low-paying, and are increasingly often service-related (e.g., restaurants, motels, retail). There are far fewer managerial, professional, and technical jobs in rural areas than in metropolitan areas.

This trend reflects the migration of more highly skilled and educated residents who leave small communities in search of higher-paying jobs. Every emigration of a talented young person is the loss of a community's investment in education. When the would-be doctors, teachers, and entrepreneurs move away, they take with them both their promise for the future and 12 year's worth of education. For rural schools, where the price-per-pupil expenditure is often higher than in metropolitan schools (due partly to the much greater cost of transportation) and where few new people immigrate *to* the community, this is a significant loss.

Education

These economic conditions impact children and their schools, as reflected in the differences between rural and metropolitan areas in a number of statistics. Rural students, for example, do not earn college degrees at the same rate as their metropolitan peers. While the high school completion rate of rural students has gradually risen during the past several decades, the gap between rural and metropolitan students for college completion has grown larger. In 1960, the discrepancy in the completion rate for these two groups was 3.4%; by 1990 it was 9.5%.

While some studies show that rural students are not as well prepared for college as their metropolitan peers, their success in higher education and, later, in the work world are linked closely to the climate of their community. "Expectations for students and teachers will vary widely from one type of rural community to the next," writes Paul Nachtigal. "The standards for those expectations are most likely tied to the experience of the adults. If there are few professional role models and if most of the adults are first generation high school graduates, the expectations will be very different than those in a community where, because of culture or location, high percentages of adults have some college or post-high school education." This is not promising news for communities that are losing their most talented residents.

Benefits of Rural Education

Although it is important to realize the many deficits under which rural schools operate, it is equally key to remember the many benefits they offer. The positive components of rural schools include mixed-age classrooms, schools-within-schools, and community

1965	1966	1970
Title I (later called Chapter I) of the Elementary and Secondary Education Act provides federal funds for supplementary programs for poor and black children. Head Start is established the same year.	Torrance Tests of Creative Thinking *are published.*	*U.S. population = 205.1 million Children in public schools = 45.6 million*

service. Indeed, urban schools are now copying some of the most successful elements of their rural counterparts. Ironically, many of these positive features have been diminished by consolidation, a process that has forced rural schools to grow bigger and to lose their ties to local communities.

From our survey sent to rural educators, we received many responses demonstrating the benefits of small schools. Teachers, superintendents, parents, students, and association presidents all stressed the following benefits of small schools:

- a higher level of child-adult contact,
- more individualized learning,
- learning through community involvement,
- participation in multiple school events.

These benefits are the norm, not the exception. As Kathleen Cotton reports, "...in small schools, everyone is needed to populate teams, offices, and clubs; thus, even shy and less able students are encouraged to participate and made to feel they belong. As schools grow larger, opportunities for participation also grow—but not proportionately: a twenty-fold increase in population produces only a five-fold increase in participation opportunities.

Students in smaller schools also have an increased sense of belonging. Among the teachers and administrators we interviewed, many of them commented on the ease they had in discussing a particular student's progress with other faculty, sometimes creating individualized plans for students with special needs and interests. Such spontaneous and flexible planning isn't as possible in a larger school where the bureaucracy is usually more rigid and the larger enrollment simply means less time per student.

Many of the gifted students we talked to commented on the benefits of both a small school and a small town. Will Nedved, from Garner, Iowa, said that his senior year independent study project on opera was possible because all of the teachers in the building knew and trusted him. "I set up a plan for my project and presented it to my teachers," said Will. "Because they knew I could work well on my own, they didn't hesitate to let me go for it. It was the most exciting, challenging thing I did in high school." Nedved eventually won a $5,000 Scholastic Art and Writing Award and was invited to Washington, D.C. to present his opera. Likewise, Tom Skuzinski, a National Merit Finalist from Reed City, Michigan, said that he really appreciated the support and security offered by his small community: "I sometimes received congratulatory notes from people in town who I didn't even know," he recalled fondly. While these students may have profited from a wider range of peers and greater academic offerings in a larger school, they clearly enjoyed the advantages of their small schools.

SOURCES FOR THIS SECTION:

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Stern, J. (Ed.) (1994). *The Condition of Education in Rural Schools* Washington, DC: U.S. Department of Education Office of Educational Research and Improvement.

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1971	1972	1975
The Study of Mathematically Precocious Youth (SMPY) is established by Julian Stanley at Johns Hopkins University; this represents the start of the Talent Search Model of Identification and Programming.	*A report by Commissioner of Education, S.P. Marland, on the state of gifted education is published.*	*The Federal Office of Gifted and Talented is established.*

State Historical Society of Iowa

Were our questions too difficult or irrelevant? We think not. They are the legitimate questions that need to be answered in order to gain a clearer picture of the status of gifted youth from small and rural areas.

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In order to learn more about the state of gifted education in rural schools, we surveyed two groups. First, we surveyed those people responsible for gifted education in state departments of education. Second, we surveyed rural educators. (Copies of both surveys can be found in Appendix A.) We will discuss the findings of the second survey in Section VIII.

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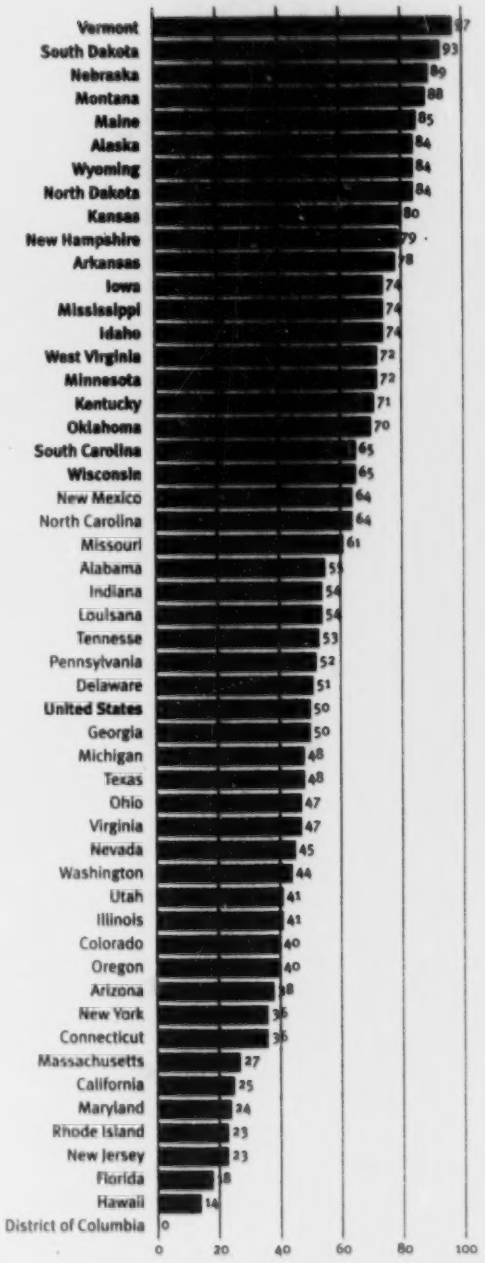
The statistically oriented first survey proved to be difficult for many state directors of gifted education to complete. We received many responses indicating that the numbers we were looking for (e.g., gifted programs, gifted teacher endorsements, AP classes, funding) either were not kept or that their offices did not have the resources to locate the information for us. Of the original 50 surveys we sent, just over half (26) sent some kind of response. We eventually focused our efforts on the 20 states with the highest percentage of school districts in rural areas and small towns and were able to receive at least partial answers from every state except one. Were our questions too difficult or irrelevant? We think not. They are the legitimate questions that need to be answered in order to gain a clearer picture of the status of gifted youth from small and rural areas. The answers to these questions, however, will obviously need more time and resources to retrieve than we had originally anticipated. This is a large part of the next phase of our work: to start a comprehensive research program, including a clearinghouse of information regarding gifted education in rural schools.

We turned to the most recent publication of the *Schools and Staffing Survey* (SASS, 1993-94) in order to focus our informational search. From the SASS table indicating the percentage of school districts located in small towns/rural areas [Table 1], we chose the 20 states with the highest percentage (indicated in bold); 65% or more of the schools in these states are in small town/rural areas. The SASS also records the percentage of public school students in small towns/rural areas [Appendix B, Table 1]; this is a markedly similar set of data, differing by only one state in the top 20. Of the two tables, we chose to create our 20-state list from Table 1 since we were also collecting data about school districts, not students.

As shown in Table 1, 50% of all public *schools* in the United States are in small towns/rural areas. Accordingly, of the approximately 87,000 American public schools, 43,500 are in small towns/rural areas. Thirty-nine percent of all public school *students* are in small towns/rural areas. This amounts to about 17,487,000 students living in small towns/rural areas.

Table 1
Percentage of Public Schools in Small Town/Rural Areas, by State: 1993-94



States in bold represent the 20 states on which we focused our study.

Source: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Public School Questionnaire)

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We focused our survey retrieval efforts on these 20 states, calling all of those who had not responded. Eventually, we received data from every state except Montana. Some of the responses we received, such as those in regards to items "C" and "E," did not always correspond with the numbers available from NCES. Thus, whenever federally procured statistics were available, we used those numbers in lieu of those from our survey. Unfortunately, many questions, especially those pertaining to AP classes and the allocation of funding to gifted students in various sized districts, could not be answered with the available data.

We were, however, able to obtain data from 19 of the 20 states with regard to the number of school districts and students in each of the three district size categories

COLLEGE CREDIT IN MICHIGAN: MATH/SCIENCE/TECHNOLOGY CENTER

Tom Skuzinki is seen as a renaissance man in his hometown of Reed City, Michigan (pop. 2,800). The National Merit Scholar finalist won the Michigan Spelling Bee and placed 22nd in the national Scripps-Howard Spelling Bee; he presented his research, "The Effects of Sound and Light Stimuli on Memory," at the National Student Research Symposium in Washington, D.C.; and he was a four-time recipient of a high school Division I rating for piano solo, while also playing in his school band and orchestra. Tom did all of this while also earning 20 hours of college credit from nearby Ferris State University.

As a student in the Math/Science/Technology Center in Big Rapids, Michigan, Tom was able to take classes in subjects such as calculus, chemistry, and pre-pharmacy. The Math/Science/Technology Center was started in 1992 to provide accelerated programming for gifted and talented students such as Tom. Students from eight middle schools are recruited from the small towns and rural areas near the Mecota-Osceola Intermediate School District, where the Center is located. A class of 26 9th graders start the program every fall. The students spend half the day in their regular school, concentrating on non-math and science coursework; the other half is spent at the Center where, for the first two years, they do a compacted high school schedule. During their final two years, they enroll in classes at Ferris State University.

Paul Bigford, the Center's director, told us in an interview that it took some convincing to let nearby schools release their top students for the program. "A lot of schools won't hesitate to send away their lower-end kids, but they're less willing to send national honors students outside the school. By pooling our resources, however, we've been able to get enough students to offer them accelerated classes and the kinds of opportunities that students in larger districts have." The students are challenged by the level of research that is demanded of them in the program. They also seem to flourish by being with peers of like-ability. "There's a synergistic effect of getting all these kids together," says Bigford.

Program graduates are being accepted at top colleges and universities. This includes Tom who is now attending the honors college at The University of Oklahoma on a $50,000 scholarship. He is working towards a B.A. in music, and plans to follow that with graduate study in either law or engineering. A good combination for a renaissance man!

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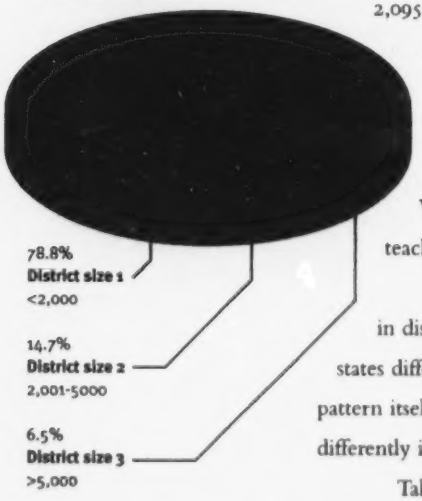
STATE	# of students	% of total	# of school districts	% of school districts	# of students	% of total	# of school districts	% of school districts	# of students	% of total	# of school districts	% of school districts	Total #
West Virginia	**20,208**	**2%**	**13**	**24%**	**710,234**	**76%**	**20**	**36%**	**209,505**	**22%**	**22**	**40%**	**939,947**
Alaska	21,933	17%	44	80%	15,868	12%	6	11%	94,110	71%	5	9%	131,911
South Carolina	24,639	19%	21	23%	100,572	77%	30	33%	5,412	4%	39	43%	130,623
Wyoming	26,048	27%	33	69%	31,055	32%	11	23%	39,401	41%	4	8%	96,504
Vermont	49,287	48%	40	68%	53,087	52%	19	32%	–	0%	0	0%	102,374
Idaho	56,488	23%	81	72%	56,396	23%	18	16%	131,519	54%	13	12%	244,403
North Dakota	57,442	49%	221	96%	19,302	17%	6	3%	39,359	34%	4	2%	116,103
South Dakota	66,007	49%	159	92%	35,296	26%	12	7%	32,395	24%	2	1%	133,698
Mississippi	74,768	15%	53	36%	221,749	44%	71	48%	205,703	41%	23	16%	502,220
Kentucky	81,202	12%	73	41%	247,976	38%	78	44%	329,665	50%	27	15%	658,843
New Hampshire	85,311	43%	136	83%	76,314	39%	24	15%	35,109	18%	3	2%	196,734
Nebraska	103,494	38%	245	92%	47,879	17%	15	6%	122,883	45%	7	3%	274,256
Maine	106,445	49%	249	87%	102,080	47%	35	12%	8,113	4%	1	0%	216,638
Kansas	164,871	35%	257	85%	95,109	20%	32	11%	207,667	44%	15	5%	467,647
Arkansas	186,218	41%	256	82%	119,936	26%	39	13%	148,735	33%	16	5%	454,889
Minnesota	229,066	27%	317	78%	182,035	21%	56	14%	435,631	51%	33	8%	846,732
Wisconsin	245,722	29%	268	72%	244,405	29%	78	21%	357,919	42%	25	7%	848,046
Iowa	246,045	50%	333	88%	99,482	20%	31	8%	150,770	30%	13	3%	496,297
Oklahoma	250,171	41%	495	90%	94,322	15%	33	6%	268,891	44%	20	4%	613,384
Total #	**2,095,365**		**3294**	**78.8%**	**2,553,097**		**614**	**14.7%**	**2,822,787**		**272**	**6.5%**	**7,471,249**

Figure 1
Percentage of school districts by size categories



we established for the survey. Table 3 shows both the number and percentage of students and schools divided by these categories. The most notable aspect of this table is that while the total student numbers are relatively similar from category to category—varying from 2,095,365 in the small size category to 2,822,787 in the large size—the numbers of school districts are dramatically different [Figure 1]. Nearly 79% of all school districts in these states have 2,000 or fewer students. (See Appendix B, Figure 4 for another representation of this phenomenon.) Despite years of consolidation, there is still an immense number of small schools nationwide. Within each of these buildings, there may be at least one administrator, one teacher, and at least one student struggling with the issues of giftedness.

Table 3, which is organized in ascending order by the number of students in districts with fewer than 2,000 students, illustrates another interesting point: the states differ, sometimes drastically, in their configurations. In other words, the lack of pattern itself is notable. Even two states with very similar total enrollments fall quite differently into the three district size categories.

Take Alaska and South Carolina, for example. Both states have close to the same number of students in the smallest districts, but they differ wildly in the other two categories. Alaska has only 12% of its students in districts with between 2,001 and 5,000

1975	1976	1980s	1980
First World Conference of the World Council for Gifted and Talented Children is held in London.	*Renzulli's Enrichment Triad Model is published in* Gifted Child Quarterly.	*University-based Talent Searches, based upon Stanley's SMPY model are formally established and proliferated.*	*U.S. population = 227.7 million Children in public schools = 41.7 million*

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students, while South Carolina has 77% of its students in districts of this size. The numbers flip, of course, in the third category (districts greater than 5,000 students) with Alaska counting in at 71% and South Carolina at just 4%. As with other discrepancies between states, this one has a sensible explanation: Alaska has a few major population centers in which they've organized large districts, whereas South Carolina is without many sizable metropolitan areas and has organized smaller districts. This example harks back to our description earlier in this report of school districts in Florida and Oklahoma and reminds us of the results of an educational system that is state directed as opposed to federally mandated.

Table 4 show us that rural areas are less diverse than their metropolitan counterparts. According to the 1993-94 SASS, just 18.8% of small towns/rural areas public school students are minorities. But to stereotype rural areas as being predominantly white misses some very important patterns. Indeed, the rural areas of New England, the Midwest, and mountain states are predominantly white. However, the South, Southwest, and Alaska look very different. Mississippi and South Carolina, for example, have two of the highest national averages of minority public school students, students who are almost entirely African Americans. But in Alaska, which also tops the national average, nearly one quarter of the students are Alaskan Native. And in New Mexico (which only misses our 20-state list by a single place) nearly half of the students are Hispanic and another 10th are American Indian; at 65.1%, the state has the second highest percentage of minority public school students in small towns/rural areas. As in other community types, people of color tend to be poorer than their white neighbors: "The prevalence in rural areas of low incomes and poverty, as well as less educational attainment, is even greater among [minority] population groups" (Stern, *The Condition of Education in Rural Schools*).

Table 4
Percentage of public school students who are minority

	Percentage distribution by state 1993-94	Percentage distribution by race or ethnicity Fall 1995				
		White	Black	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
United States	**18.8**	**64.8**	**16.8**	**13.5**	**3.7**	**1.1**
Alabama	29.1	62.1	36.0	0.5	0.6	0.7
Alaska	**38.3**	**63.7**	**4.6**	**2.7**	**4.4**	**24.5**
Arizona	50.2	56.9	4.3	30.0	1.7	7.2
Arkansas	**22.3**	**73.9**	**23.6**	**1.5**	**0.7**	**0.4**
California	39.7	40.4	8.8	38.7	11.2	0.9
Colorado	16.3	72.5	5.5	18.4	2.5	1.1
Connecticut	4.3	72.0	13.5	11.8	2.4	0.3
Delaware	31.0	64.7	29.4	4.0	1.7	0.2
District of Columbia	—	4.0	87.6	7.0	1.4	—
Florida	27.1	57.5	25.3	15.3	1.8	0.2
Georgia	29.4	58.2	37.8	2.2	1.6	0.1
Hawaii	67.4	22.9	2.6	4.9	69.3	0.4
Idaho	**11.4**	**88.4**	**0.6**	**8.4**	**1.2**	**1.3**
Illinois	5.1	63.6	21.1	12.2	3.0	0.1
Indiana	1.8	85.6	11.1	2.3	0.8	0.2
Iowa	**2.7**	**92.7**	**3.3**	**2.1**	**1.5**	**0.4**
Kansas	**10.3**	**82.6**	**8.5**	**6.0**	**1.8**	**1.1**
Kentucky	**4.2**	**89.1**	**9.8**	**0.4**	**0.6**	**0.1**
Louisiana	40.3	51.0	46.0	1.1	1.3	0.5
Maine	**2.1**	**97.3**	**0.8**	**0.4**	**0.9**	**0.6**
Maryland	13.5	57.5	35.0	3.3	3.8	0.3
Massachusetts	12.2	78.5	8.2	9.3	3.8	0.2
Michigan	4.4	76.4	18.4	2.7	1.5	1.0
Minnesota	**5.9**	**87.4**	**4.8**	**2.0**	**3.9**	**1.9**
Mississippi	**49.3**	**47.7**	**51.0**	**0.3**	**0.6**	**0.4**
Missouri	4.3	81.7	16.1	1.0	1.0	0.2
Montana	**15.4**	**87.5**	**0.5**	**1.4**	**0.8**	**9.8**
Nebraska	**4.5**	**87.2**	**5.9**	**4.4**	**1.3**	**1.4**
Nevada	16.7	66.5	9.8	17.2	4.5	1.9
New Hampshire	**1.7**	**96.7**	**0.9**	**1.2**	**1.1**	**0.2**
New Jersey	14.0	62.5	18.5	13.5	5.4	0.2
New Mexico	65.1	39.5	2.4	46.8	1.0	10.4
New York	7.8	56.9	20.2	17.4	5.0	0.4
North Carolina	32.4	64.6	30.7	1.9	1.3	1.5
North Dakota	**9.8**	**90.8**	**0.8**	**1.1**	**0.8**	**6.6**
Ohio	4.6	82.2	15.3	1.4	1.0	0.1
Oklahoma	**26.0**	**69.4**	**10.5**	**3.9**	**1.3**	**15.0**
Oregon	14.1	85.3	2.6	6.8	3.4	2.0
Pennsylvania	4.2	80.6	14.0	3.5	1.8	0.1
Rhode Island	—	78.9	7.0	10.3	3.3	0.5
South Carolina	**45.7**	**56.3**	**42.1**	**0.7**	**0.8**	**0.2**
South Dakota	**13.8**	**83.7**	**0.9**	**0.7**	**0.7**	**13.9**
Tennessee	11.3	75.3	23.1	0.7	0.8	0.1
Texas	39.3	46.4	14.3	36.7	2.3	0.3
Utah	7.1	90.4	0.7	5.3	2.2	1.4
Vermont	**2.9**	**97.3**	**0.7**	**0.4**	**1.0**	**0.6**
Virginia	21.8	66.6	26.5	3.2	3.5	0.2
Washington	16.9	78.3	4.7	7.8	6.5	2.6
West Virginia	**3.6**	**95.2**	**4.0**	**0.3**	**0.4**	**0.1**
Wisconsin	**3.6**	**83.2**	**9.4**	**3.3**	**2.8**	**1.3**
Wyoming	**9.6**	**89.3**	**1.0**	**6.1**	**0.8**	**2.7**

States in bold are the top-20 rural states.

Source: Schools and Staffing Survey 1993-94, p.22, Digest of Education Statistics 1997, p. 60

1981	1983	1983	1984
The Federal Office of Gifted and Talented is dissolved.	Nation At Risk, *a report deriding the state of American education, is published.*	*Howard Gardner's* Frames of Mind *is published introducing the theory of multiple intelligences.*	*About 430 one-room school houses are still in operation.*

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Table 5
Percentage of public elementary and secondary students participating in free or reduced-price lunch programs, by state: 1993-94.

	Students Receiving	
	Elementary	Secondary
United States	**37.9**	**21.9**
Alabama	47.3	31.1
Alaska	**21.7**	**9.0**
Arizona	42.6	22.4
Arkansas	**46.0**	**28.3**
California	45.2	22.7
Colorado	30.0	12.2
Connecticut	19.4	10.5
Delaware	30.4	19.5
District of Columbia	69.4	40.5
Florida	43.1	23.3
Georgia	42.4	25.7
Hawaii	34.9	20.0
Idaho	**31.0**	**19.8**
Illinois	35.0	19.8
Indiana	30.1	14.5
Iowa	**27.6**	**20.2**
Kansas	**31.2**	**20.3**
Kentucky	**44.1**	**29.6**
Louisiana	55.5	37.2
Maine	**32.1**	**16.4**
Maryland	28.5	15.1
Massachusetts	24.3	15.2
Michigan	31.4	19.6
Minnesota	**24.1**	**21.8**
Mississippi	**53.3**	**52.8**
Missouri	36.8	19.3
Montana	**31.0**	**19.8**
Nebraska	**28.9**	**23.8**
Nevada	29.8	5.9
New Hampshire	17.6	10.8
New Jersey	28.7	16.2
New Mexico	52.5	29.8
New York	46.6	22.3
North Carolina	38.1	19.7
North Dakota	**28.4**	**21.7**
Ohio	30.7	15.2
Oklahoma	**40.6**	**28.0**
Oregon	32.3	14.3
Pennsylvania	33.9	22.8
Rhode Island	31.7	9.8
South Carolina	**45.7**	**26.8**
South Dakota	**31.0**	**26.4**
Tennessee	40.8	24.6
Texas	43.6	28.8
Utah	29.3	18.5
Vermont	**25.0**	**14.8**
Virginia	30.6	18.3
Washington	30.6	17.1
West Virginia	**46.7**	**27.3**
Wisconsin	**27.2**	**19.3**
Wyoming	**27.4**	**16.7**

States in bold are the top-20 rural states.

Source: Schools and Staffing Survey, 1993-94, p. 11

The statistics for free or reduced-lunch program participation are nearly a mirror image of the minority statistics [Table 5]. Those states with the highest percentage of minority students are also the ones with the highest percentage of public elementary students who participate in the federally funded free and reduced lunch program. Although the top-20 rural states as a group fall just below the national average for participation in the free and reduced lunch program (33% as compared to the national average of 37.9%), the more southern states on the list have among the highest percentages of participation in the country. Mississippi, for example, has a staggering 53.3% of its students in the program, and Arkansas has 46%. By contrast, the New England state of New Hampshire has the lowest percentage of students in the country participating in the program—just 17.6%. Although rural states are not all affected equally by the level of poverty that necessitates inclusion in the lunch program, those that do fall on the upper end of the scale have particularly acute need.

Teachers are paid less in our top-20 rural states. The national average teacher salary for 1995-96 was $37,643. With the exception of Alaska, which has one of the highest teacher salaries in the country due to its high cost of living, none of the top-20 rural states had a higher average salary than the U.S. average. South Dakota and North Dakota had the lowest and third lowest average salaries, respectively, of all states. For minimum beginning salary [Table 6], three states (Wisconsin, Oklahoma, and Vermont) paid about the same as the national average of $24,507. All other states—again, with the notable exception of Alaska—paid under the national average. Past SASS reports also indicate that teachers in rural areas have lower levels of educational attainment than their nonrural peers. For example 60.5% of secondary rural teachers have B.A. degrees or less, compared to 44.5% of secondary nonrural teachers.

The picture that comes into focus of the 20 states with the highest percentage of schools in small towns/rural areas is a disparate one. Regional patterns are distinguishable, especially in terms of economics and race. As a group, these states often fall below the national average. The above numbers indicate need for further research and assistance.

Table 6
Minimum teacher salaries, by state: 1995-96

	Minimum (beginning) salary
United States	**$24,507**
Alabama	$24,824
Alaska	**$34,800**
Arizona	$24,042
Arkansas	**$21,189**
California	$25,762
Colorado	$21,472
Connecticut	$28,840
Delaware	$24,300
District of Columbia	$25,937
Florida	$23,508
Georgia	$24,693
Hawaii	$25,436
Idaho	**$19,667**
Illinois	$26,753
Indiana	$24,216
Iowa	**$21,338**
Kansas	**$21,607**
Kentucky	**$22,457**
Louisiana	$19,406
Maine	**$20,725**
Maryland	$26,846
Massachusetts	$25,815
Michigan	$25,635
Minnesota	**$23,998**
Mississippi	**$20,150**
Missouri	$21,996
Montana	**$19,992**
Nebraska	**$21,299**
Nevada	$25,576
New Hampshire	**$23,510**
New Jersey	$31,435
New Mexico	$22,634
New York	$28,749
North Carolina	$20,620
North Dakota	**$18,225**
Ohio	$20,355
Oklahoma	**$24,187**
Oregon	$24,592
Pennsylvania	$29,514
Rhode Island	$24,754
South Carolina	**$21,791**
South Dakota	**$19,609**
Tennessee	$21,537
Texas	$22,642
Utah	$20,544
Vermont	**$24,445**
Virginia	$25,500
Washington	$24,590
West Virginia	**$22,011**
Wisconsin	**$24,560**
Wyoming	**$21,900**

States in bold are the top-20 rural states.

Source: Digest of Education Statistics 1997, p. 86

SOURCES FOR THIS SECTION:

National Center for Education Statistics (1997). *Digest of Education Statistics 1997*. Washington, DC: U.S. Department of Education Office of Educational Research and Improvement.

Stern, J. (Ed.) (1994). *The Condition of Education in Rural Schools*. Washington, DC: U.S. Department of Education Office of Educational Research and Improvement.

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Survey Rural ...ors

One of the best indications we received of the quality of life in rural schools, as it pertains to giftedness, came from a six-question survey of rural educators. In March 1998, we mailed 55 surveys to members of rural associations, rural-related advisory boards of national committees, and rural experts at the 10 regional educational laboratories. Additional copies were made and dispersed by some of the original recipients. By July, we had received 28 returned and completed surveys. [See Appendix A for more information.] Here is a summary of the responses.

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Question 1:
How are gifted and talented students typically identified for gifted and talented programs in small/ rural schools?

Not surprisingly, the answers we received here did not differ from the types and range of responses the Belin-Blank Center receives from all sorts of schools, no matter their locale. Standardized tests, such as IQ tests and the ITBS, were the most common response, followed by teacher recommendations.

Question 2:
How well are gifted and talented students being served by their schools?

Perhaps one of the best responses to this question came from an educator in Wyoming who wrote, "It varies greatly even within our small district of three schools." As with so many elements of education, if one teacher or one administrator supports a method of teaching or realizes the needs of a special group, then a pocket of students will be served exceptionally well, while in the next room or the next building similar students may receive limited attention.

Many respondents focused on the positives, mentioning that technology, recently established standards, and multi-grade programming are all serving gifted students well. The majority of answers, however, indicated that services for these students are inadequate: "Minimally," "Barely adequate," and "Not well at all," were typical introductory phrases. Others, such as the following curriculum specialist, blamed a lack of funding: "Students in rural areas are not as well served as those in larger districts. This is due to the fact that in order to receive state reimbursement for providing these services, a district must employ a teacher credentialed in the area. Most schools do not have the resources to employ a specialist for a non-mandated area."

"It varies greatly even within our small district of three schools."

Another rural educator echoed those sentiments, explaining that since the mandate and funding for gifted education in her state was rescinded several years ago, programming has gradually dried up: "The problem with gifted education in our state is that most administrators and schools boards don't see the importance of the program. Typically, the majority of funds are spent to aid students in the lower end of the spectrum." Finally, the director of a rural education association said that gifted students are served "minimally." He went on to credit this lack of service with insufficient teacher preparation and time constraints.

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1985	1988
Robert Sternberg's Beyond IQ *is published.*	The Jacob K. Javits Gifted and Talented Students Education Act *is passed by Congress, providing support for national demonstration grants, a national research and development center, and national leadership activities.*

Question 3:
What are the two to three most important needs of teachers of gifted and talented students in small/rural districts?

Reflecting some of the previous responses, three themes surfaced in this set of responses: training, time, and administrative support. The overwhelming percentage of rural educators surveyed said that teachers need training to help them develop curricula for gifted and talented students, as well as to be able to better understand these students' needs. Some respondents, echoing the belief of the Belin-Blank Center, furthered this point by saying that the first step should be to better challenge *all* students. ("A more challenging curriculum in the regular classroom is needed.") After raising the bar for everyone, then educators can focus on the needs of specific groups of students, including the gifted.

In order to prepare materials for gifted and talented students, about one-third of respondents believed that more time was necessary for planning and for meetings between faculty members. As one director of a rural research center said, "Time is of the essence! Time to prepare and time with the students." The overwhelming message was that teachers are already painfully short of time to plan, so being expected to create special lessons for a small segment of a class is an additional burden that needed to be considered.

"Time is of the essence! Time to prepare and tim with the students."

Respondents also said that teachers need the support of building administrators to first understand the needs of gifted and talented students and to serve as leaders to their teachers in this area, and secondly to support gifted and talented programming by allowing for training, preparation time, and financial support of materials and other student services (e.g., field trips, programming outside the building). Although financial support was a common theme, one regional coordinator said that this took a backseat to the necessity of well-trained teachers and dedicated administrators: "Because if [these things] are in place then lack of resources and funds becomes merely an inconvenience."

Question 4:
What benefits do small/rural schools provide gifted and talented students?

We received very enthusiastic responses to this question. The most common comments stressed the advantages of a small enrollment. A small enrollment translates to greater opportunity for students and adults—be they teachers, custodians, coaches, or librarians—to interact. A smaller enrollment also means less bureaucracy and improved communication. This is somewhat akin to the difference of, say, a locally owned computer store with 10 employees and a giant corporation like Microsoft. Teachers see each other more often in a smaller building and have more time for discussion because they are responsible for fewer total students, as opposed to larger buildings where teachers may interact only by grade level or subject matter. Teachers in rural districts are more apt to compare notes about specific students, sometimes even developing individualized learning plans.

Small enrollments also allow students to participate more easily and actively in school clubs and events. Students have a higher degree of interaction with children in

1988	1988
The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development is established at The University of Iowa (Nicholas Colangelo, Director).	The Javits Gifted and Talented Gifted Education Act *(PC 100-297) is passed, providing for special emphasis on economically disadvantaged students, limited-English-proficient students, and students with disabilities who are gifted and talented.*

other grades, often taking classes in multi-grade rooms or tutoring across grade levels. Small schools also sometimes have more connection to their immediate communities, as opposed to large buildings that can be mini cities unto themselves. This allows for students to apply learning more immediately via volunteer, mentor, and school-to-work programs.

"It is my experience that without competition and resources, gifted students in rural areas can coast by until college."

Despite the many benefits of small schools, one gifted and talented coordinator in a rural district questioned whether the positives outweighed the negatives: "If the gifted student is able to survive boredom and not being challenged, as well as not having enough local resources for independent study, he or she has the doubtful 'honor' to be the big fish in a little pond... It is my experience that without competition and resources, gifted students in rural areas can coast by until college."

Question 5: What are the major obstacles facing gifted students in small/rural schools?

More than one-third of respondents said that teacher and administrator misunderstanding of the needs of gifted and talented students was the biggest obstacle. Also, harkening back to Question 3, the lack of sufficient financial support was another common answer, particularly the small tax base and lack of private funds from local companies. Other responses seemed to hold true for any school in any locale, including a lack of flexibility in scheduling, misconceptions on the part of school board members and parents regarding giftedness, and overall confusion regarding the benefits of acceleration.

But two answers seemed specific to rural schools. First is the lack of community resources available in and around most rural communities. Many respondents commented on the distance between their school and the closest university, museum, or town with professionals such as doctors and engineers who could serve as mentors to students. Even in cases where a school is less than an hour away from such a center, the resources are still under used because the amount of time and money necessary to bring students to them is too great.

"It's hard to be bright in a small school; you stick out."

Another uniquely rural phenomenon is the sense of isolation that gifted and talented students experience in rural schools. Not only are they geographically isolated, but they are often alone in their interests and aptitude. There is a strong sense among some of these students, particularly in the smallest schools and most impoverished communities, that "no one is like me here." One woman who is now a professor of mathematics grew up in the rural Midwest where her family moved often. She said, "In school, there wasn't anyone who was interested in discussing things that I cared about. It's hard to be bright in a small school; you stick out."

1990s	1990	1990	1993
Early entrance to University programs are developed. *Home-schooling develops and expands as an option for gifted and talented students.*	*U.S. population = 249.4 million* *Children in public schools = 40.5 million*	*The National Research Center on the Gifted and Talented is established at The University of Connecticut (Joseph Renzulli, Director).*	National Excellence: A Case for Developing America's Talent *is published by the U.S. Department of Education*

Much more needs to be learned about the best ways of identifying and serving gifted youth in rural schools. Currently, there is an inadequate conglomeration of mismatched research and data that does little to help those on the educational frontlines who are trying to provide effective programming for these students. The Belin-Blank Center proposes several steps to take as we work toward improving education for the gifted in rural schools.

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Gifted educators and rural educators must talk to each other.

We need to listen to each other's experiences, goals, and successes. Let's not reinvent the wheel, but let's learn from one another about the best approaches to working with talented students who attend rural schools. Our goal is not to dictate programming to rural schools, but to develop programming that dovetails with their curricular strengths. We also seek to build partnerships between gifted and rural education. The Wallace Family National Conference on Gifted Education in Rural Schools will be an excellent place to begin this dialogue. Future venues will include an online listserv and a research journal.

Teachers and administrators must have easy access to best practices and training.

Over and over we have heard from educators that they simply don't have the time to create new materials for gifted students or to seek out sound materials. Let's do this background work for teachers and administrators, making resources available via the Internet and distance learning, as well as through newsletters and other vehicles for updates. We can also provide educators with avenues for sharing their work and insights. Rural administrators have also expressed interest in training teachers in the most current methodologies. Professional developments can help educators understand things such as how to identify gifted students, how to meet their needs in a regular classroom, when to consider acceleration as an option, and how to work effectively with parents.

The establishment of an information clearinghouse would improve research and result in improved recognition and funding for the needs of gifted students in rural areas.

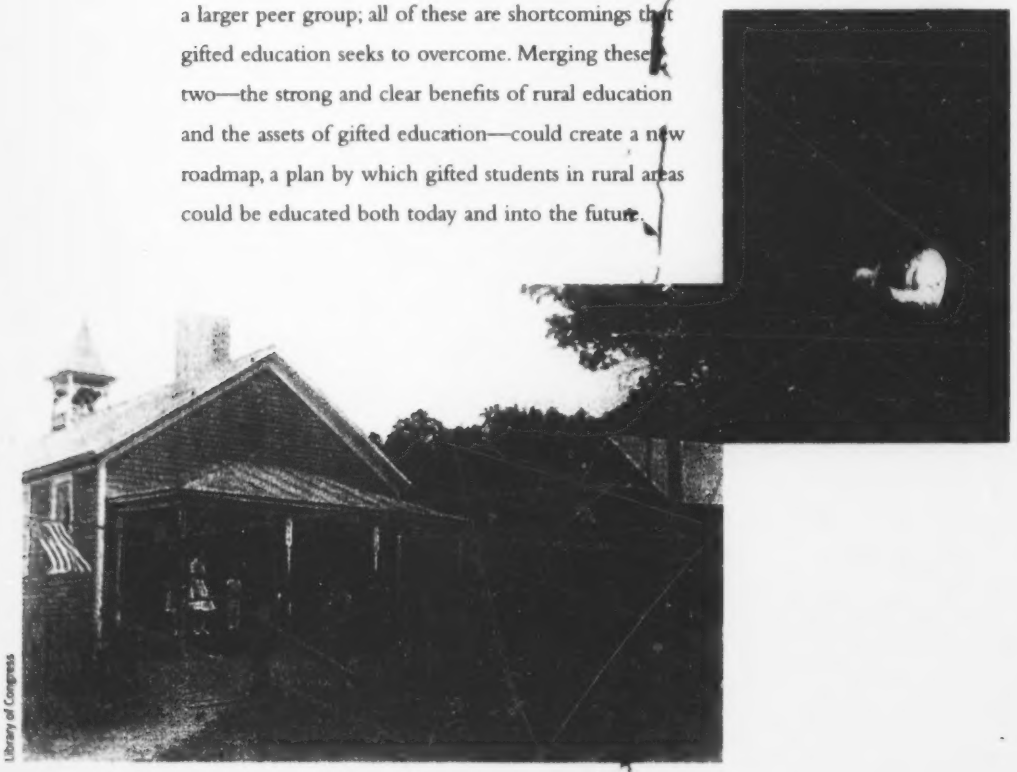
As we discussed earlier in this report, the kind of information that is necessary to most fully understand the condition of gifted education in rural schools is not readily available. We intend to collect and make available for other researchers the kinds of information found in this report. This is just a beginning; the work of surveying, analyzing, and dispersing such information must be an ongoing process.

1994	1994	Mid-1990s	1996
Goals 2000, *a framework for meeting national education goals promoting high standards, is passed under the Clinton Administration.*	*The Office of Educational Research and Improvement publishes* The Condition of Education in Rural Schools.	*All states have an office/coordinator for gifted/talented education in their respective Departments of Education.*	*There are 14,883 school districts in the U.S.*

Current and proposed programs should be evaluated.

We need to learn from both our successes and our failures. Assessing gifted programs in rural schools nationwide would help us with the previous two goals by 1) providing best practice examples for other educators, and 2) serving as data collection sites. Furthermore, schools and districts that are planning gifted programs could have their designs reviewed in advance.

These are among the most important next steps the Belin-Blank Center hopes to achieve as we turn our full attention to the challenge of improving gifted education in rural schools. The bottom line is that both gifted education and rural education have something to gain from the other. Countless students who were schooled in small towns across this country recall their educational experience fondly, as much for the experiences offered by their communities as by the actual school work. Others, of course, have yearned to be more challenged, to have access to greater resources, and to be a part of a larger peer group; all of these are shortcomings that gifted education seeks to overcome. Merging these two—the strong and clear benefits of rural education and the assets of gifted education—could create a new roadmap, a plan by which gifted students in rural areas could be educated both today and into the future.



Library of Congress

1998	1999	2000
Belin-Blank Center at The University of Iowa initiates a National Program for Gifted Education in Rural Schools.	*The Belin-Blank Center publishes* Gifted Education in Rural Schools: A National Assessment *and hosts the First Biennial Wallace Family National Conference on Gifted Education in Rural Schools.*	*The National Program for Gifted Education in Rural Schools expands, focussing on teacher training, students programs, and the use of technology.*

Appendix A: Surveys

Procedures

1. A literature review of books and articles regarding gifted education in rural settings, rural education, school size, and special education in rural schools was performed using ERIC and The University of Iowa's library catalog. Survey 1 was mailed to the state directors of gifted education in all 50 states.
2. A first copy of the survey was mailed on March 17, 1998, followed by a reminder postcard two weeks later. A second letter with an additional copy of the survey was mailed on April 27. We received 21 responses, more than half of which were incomplete.
3. Survey II was mailed to 58 leaders of rural education (e.g., board members of the National Rural Education Association, representatives from the 10 educational labs, members of state rural education associations) on April 2, 1998. A reminder postcard was mailed two weeks later, and a second letter with an additional copy of the survey was mailed on May 4. We received 26 completed surveys by August, 1998.
4. Relevant statistics and tables were located from National Center for Education Statistics reports, including the *Schools and Staffing Survey 1993-94, The Condition of Education 1997,* and the *Digest of Education Statistics 1997.*
5. Additional research was done on the 20 rural states with the highest percentage of school districts in small towns and rural areas, based on the *Schools and Staffing Survey 1993-94,* including phone calls and Web searches to their state departments of education to find information missing from Survey 1. Responses for questions A-E were located for all of the top-20 states except Montana.

03

SURVEY I

Directions:

- Please answer all of the questions (front and back) as they pertain to K-12 public schools in your state.
- In the following questions, "GT" refers to gifted and talented.
- Please indicate "not available" when you are unable to answer a question. If you have any information, however, that seems related to a given question, do not hesitate to include it. If for any of these responses it is easier to include a photocopy or some other document, please do so.
- Please provide numbers for each of the three size categories for every question unless we indicate that a breakdown is unnecessary.

QUESTIONS		K-12 PUBLIC SCHOOLS Districts with less than 2,000 students	Districts with between 2,001 - 5,000 students	Districts with more than 5,000 students
A. How many districts are there by size category?				
B. How many students are there by size category?				
C. How many students are eligible for free and reduced lunch?				
D. How many teachers are there by size category?				
E. How many students are there from each of these racial/ ethnic groups?	African-American/Black			
	American Indian, Alaska Native			
	Caucasian-American/White			
	Mexican-American/Chicano			
	Asian-American, Pacific Islander			
	Puerto Rican, Cuban, other Hispanic Origin			
	Other			
F. How many GT students are identified?				
G. How many approved GT programs are there?				
H. What percentage of your state education budget is allocated to GT?				
I. How much money is allocated per GT student?				
J. How many districts offer honors or AP calculus?				
K. How many districts offer two or more honors courses of AP science?				
L. How many districts offer two or more honors courses of AP in Language Arts and/or Social Studies?				
M. How many districts offer two or more foreign languages?				
N. Is there a GT teaching endorsement in your state? If yes, how many teachers have this endorsement?		☐ Yes ☐ No		
O. How many GT-endorsed teachers are there by size category?				
P. Mark the GT definition that best describes the one used by your state:		☐ Federal definition (Marland, 1972) ☐ Renzulli Triad Learner ☐ Multiple Talents/Gardner ☐ Structure of Intellect (SOI) ☐ Javits (1993) ☐ Talent Search/Above-level Testing ☐ Other: (please specify) _____		
Q. Does your state provide guidelines for evaluation of GT programs? (Please indicate the breakdown here or enclose the numbers.		☐ Yes ☐ No		
R. What size categories does your state use to segment school districts? Please indicate the breakdown here or enclose				

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SURVEY II

Please respond to the following questions based on both your own experience and that of your organization. Keep in mind that K-12 gifted and talented students in public school districts with fewer than 2,000 students are the focus of our assessment.

1. From your experience, how are gifted students typically identified for gifted programs in small/rural school districts?

2. From your experience, how well do you think identified gifted students in rural areas are being served by their schools?

3. What do you consider the two or three most important needs of teachers of gifted students in the small/rural school district?

4. What benefits do small and rural schools provide gifted students?

5. What are the major obstacles facing gifted students in small and rural schools?

In addition to these questions, we would be interested in hearing your impressions of gifted and rural students in your state. Please include any other information or thoughts you have regarding gifted and rural education which we have failed to ask about. **Thank you for your time.**

Survey I. The following table indicates the responses received for Survey I. *Yes* indicates a complete response. *No* indicates no response. And *part* indicates partial response. The top-20 rural states are in bold.

State	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Alabama	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	part
Alaska	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes
Arizona	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Arkansas	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	no	yes	yes	yes
California	no	no	no	no	part	part	part	yes	part	no	no	no	no	yes	no	yes	yes	yes
Colorado	yes	yes	yes	part	part	yes	yes	yes	yes	no	no	no	no	yes	no	yes	yes	part
Connecticut	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Delaware	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Florida	yes	yes	yes	no	yes	yes	yes	no	no	no	no	no	no	yes	no	yes	yes	no
Georgia	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Hawaii	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Idaho	part	no	no	no	no	part	no	no	part	no	no	no	no	yes	no	yes	yes	part
Illinois	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Indiana	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Iowa	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes	no
Kansas	yes	yes	no	yes	yes	yes	no	no	yes	no	no	no	no	yes	yes	yes	yes	no
Kentucky	yes	yes	yes	no	no	no	yes	no	no	no	no	no	no	yes	no	yes	yes	part
Louisiana	yes	yes	no	no	yes	yes	yes	no	no	no	no	no	no	yes	no	yes	yes	no
Maine	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Maryland	yes	yes	yes	part	no	yes	part	part	part	yes	yes	yes	yes	yes	no	yes	yes	part
Massachusetts	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Michigan	yes	yes	yes	no	yes	part	part	yes	part	no	no	no	no	yes	no	yes	yes	yes
Minnesota	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Mississippi	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Missouri	yes	yes	yes	yes	part	yes	yes	yes	part	part	part	part	part	yes	no	yes	yes	no
Montana	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Nebraska	yes	yes	no	no	part	no	part	yes	no	no	no	no	no	yes	no	yes	yes	no
Nevada	yes	yes	yes	yes	yes	yes	no	no	no	no	no	no	no	yes				
New Hampshire	yes	yes	no	yes	yes	no	no	no	no	no	no	no	no	no	no	no	no	no
New Jersey	no	no	no	no	no	no	no	no	no	no	no	no	no	yes	no	no	yes	no
New Mexico	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
New York	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
North Carolina	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
North Dakota	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Ohio	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Oklahoma	yes	yes	no	no	part	part	yes	yes	yes	no	no	no	no	yes	no	yes	yes	no
Oregon	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Pennsylvania	part	no	no	no	no	part	part	no	no	no	no	no	no	yes	no	yes	yes	no
Rhode Island	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
South Carolina	yes	yes	yes	yes	part	yes	no	no	yes	yes	yes	yes	yes	yes	no	yes	yes	no
South Dakota	yes	part	part	part	part	part	no	no	no	part	part	part	part	yes	no	yes	yes	yes
Tennessee	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Texas	yes	yes	part	part	part	part	yes	part	yes	no	no	no	no	yes	no	yes	yes	yes
Utah	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Vermont	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Virginia	no	no	no	no	no	part	part	no	part	part	part	part	no	yes	no	yes	yes	no
Washington	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
West Virginia	yes	yes	no	no	no	yes	part	yes	part	part	part	part	part	yes	no	yes	yes	no
Wisconsin	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Wyoming	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no

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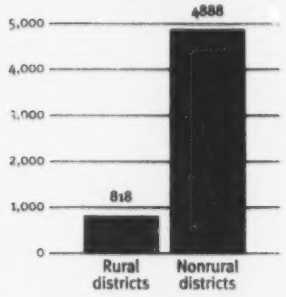
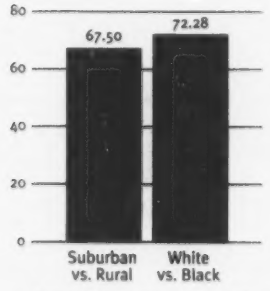
Appendix B: Related Tables and Figures

Figure 1
Average enrollment size of school districts in rural and nonrural locations in 1993-94



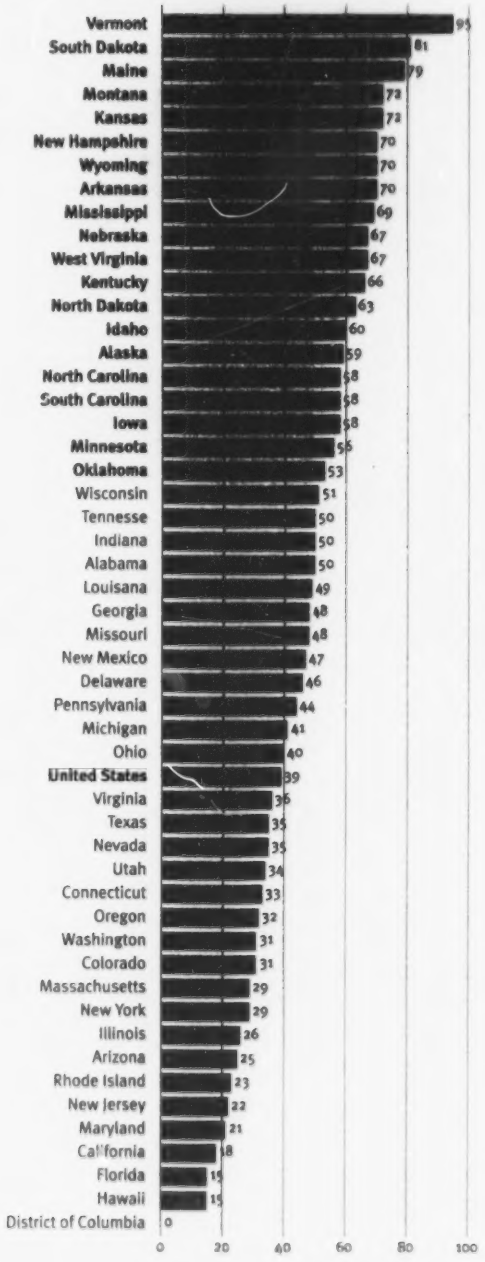
Source: U.S. Department of Education, National Center of Education Statistics, Common Core of Data

Figure 2
SAT combined score gap between white and black and suburban and rural Talent Identification Program 1992 talent search participants



Source: Wallace Research Symposium proceedings, David Goldstein, Duke University

Table 1
Percentage of Public School Students in Small Town/Rural Areas, by State: 1993-94



Top-20 rural states are in bold.

Source: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94 (Public School Questionnaire)

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Table 2
Direct general expenditures per capita of state and local governments by level and state: 1992-93

	Elementary and secondary education	
	Amount per capita	**As a percent of all functions**
United States	**$931.76**	**23.4**
Alabama	$604.32	18.4
Alaska	**$1,817.84**	**18.1**
Arizona	$879.81	24.4
Arkansas	**$707.23**	**23.8**
California	$850.02	19.7
Colorado	$922.90	22.8
Connecticut	$1,152.41	23.9
Delaware	$972.53	22.2
District of Columbia	$1,071.63	13.9
Florida	$815.84	22.1
Georgia	$859.03	24.5
Hawaii	$711.69	13.1
Idaho	$761.93	24.2
Illinois	$875.70	23.8
Indiana	$861.68	24.7
Iowa	**$906.75**	**23.7**
Kansas	**$945.03**	**26.5**
Kentucky	**$684.97**	**20.9**
Louisiana	$785.06	20.4
Maine	**$957.67**	**24.8**
Maryland	$905.65	24.4
Massachusetts	$826.99	19.3
Michigan	$1081.91	27.2
Minnesota	**$1,121.22**	**23.3**
Mississippi	**$681.73**	**22.7**
Missouri	$784.10	26.9
Montana	**$965.42**	**26.1**
Nebraska	**$999.19**	**27.7**
Nevada	$857.19	21.3
New Hampshire	**$902.77**	**23.9**
New Jersey	$1,271.79	27.5
New Mexico	$867.96	21.4
New York	$1,289.81	21.8
North Carolina	$774.92	23.3
North Dakota	**$862.27**	**21.4**
Ohio	$887.37	25.0
Oklahoma	**$842.09**	**26.5**
Oregon	$1,021.77	24.9
Pennsylvania	$1,033.21	27.1
Rhode Island	$928.98	20.7
South Carolina	**$796.08**	**23.2**
South Dakota	**$857.34**	**25.2**
Tennessee	$622.02	20.3
Texas	$951.31	27.8
Utah	$874.29	25.7
Vermont	**$955.41**	**24.4**
Virginia	$880.16	26.0
Washington	$1,132.45	23.8
West Virginia	**$933.24**	**26.8**
Wisconsin	**$1,078.02**	**25.4**
Wyoming	**$1,264.73**	**24.7**

Top-20 rural states are in bold.

U.S. Dept. of Education, NCES. Source: Digest of Education Statistics 1997, p. 39

Table 3
Poverty status of 5-17-year-olds, 1995: Percent in poverty

United States	**19.0**
Alabama	22.6
Alaska	**6.7**
Arizona	24.2
Arkansas	**21.7**
California	23.4
Colorado	10.7
Connecticut	17.8
Delaware	16.6
District of Columbia	31.5
Florida	22.1
Georgia	15.6
Hawaii	14.2
Idaho	**16.7**
Illinois	20.3
Indiana	14.5
Iowa	**15.5**
Kansas	**10.7**
Kentucky	**19.3**
Louisiana	24.4
Maine	**14.3**
Maryland	13.3
Massachusetts	16.8
Michigan	14.8
Minnesota	**10.4**
Mississippi	**36.4**
Missouri	9.8
Montana	**19.0**
Nebraska	**11.9**
Nevada	11.1
New Hampshire	**4.3**
New Jersey	9.5
New Mexico	34.9
New York	23.6
North Carolina	20.2
North Dakota	**13.2**
Ohio	17.1
Oklahoma	**24.2**
Oregon	16.2
Pennsylvania	16.5
Rhode Island	16.4
South Carolina	**31.7**
South Dakota	**17.3**
Tennessee	19.6
Texas	23.1
Utah	8.4
Vermont	**13.0**
Virginia	14.5
Washington	16.6
West Virginia	**25.8**
Wisconsin	**11.2**
Wyoming	**10.6**

Top-20 rural states are in bold.

U.S. Dept. of Education, NCES. Source: Digest of Education Statistics 1997, p. 27

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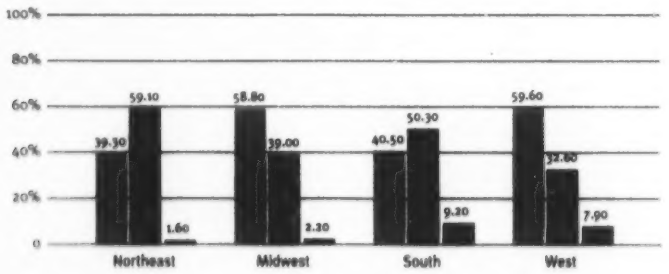
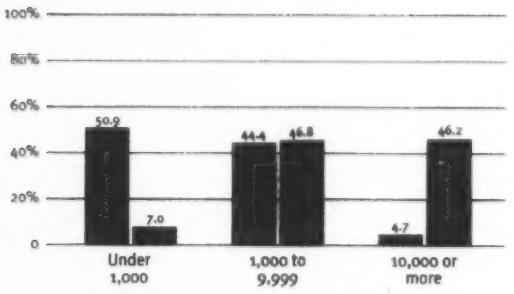
Figure 3
Percentage of public school districts by district size, by region: 1993-94



Note: Details may not sum to 100.0 percent due to rounding.

Source: U.S. Department of Education, National Center of Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Figure 4
Percentage of districts and students, by district size: 1993-94



Source: U.S. Department of Education, National Center of Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

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Appendix C: Resources

Gifted and Talented Organizations and Periodicals

The Association for the Gifted (TAG)
Council for Exceptional Children
1920 Association Drive
Reston, VA 22091
(800) 336-3278

The Connie Belin & Jacqueline N. Blank International Center for Gifted Education & Talent Development
Dr. Nicholas Colangelo, director
Dr. Susan Assouline, associate director
210 Lindquist Center
The University of Iowa
Iowa City, IA 52242-1529
(800) 336-6463
http://www.uiowa.edu/~belinctr

Gifted Child Quarterly
1155 15th Street, N.W.
Suite 1002
Washington, DC 20005
(202) 785-9268

Jacob K. Javits Gifted & Talented Students Education Program
Liz Barnes and Patricia O'Connell Ross, team leaders
U.S. Department of Education
Office of Educational Research and Improvement
555 New Jersey Avenue, NW
Washington, DC 20208-5645
(202) 219-2116
http://www.ed.gov/prog_info/Javits/

Journal of Creative Behavior
Creative Educational Foundation, Inc.
1050 Union Road
Buffalo, NY 14224

Journal for the Education of the Gifted
University of North Carolina Press
P.O. Box 2288
Chapel Hill, NC 27515-2288

The Journal of Secondary Gifted Education
Prufrock Press
P.O. Box 8813
Waco, TX 76714-8813

National Association for Gifted Children
Peter Rosenstein, executive director
1155 15th Street, N.W.
Suite 1002
Washington, DC 20005
(202) 785-4268
http://www.nagc.org/

National Research Center on the Gifted and Talented
Dr. Joseph S. Renzulli, director
The University of Connecticut
362 Fairfield Road, U-7
Storrs, CT 06269-2007
(860) 486-4826
http://www.gifted.uconn.edu

Roeper Review
Roeper City and County Schools
P.O. Box 329
Bloomfield Hills, MI 48303-0329
(313) 642-1500

Rural Education Organizations and Periodicals

American Council on Rural Special Education
Kansas State University
2323 Anderson Ave., Ste. 226
Manhattan, KS 66502
http://www.ksu.edu/acres/

ERIC Clearinghouse on Rural Education and Small Schools
Timothy Collins, director
Appalachia Educational Laboratory
P.O. Box 1348
Charleston, WV 25325-1348
(800) 624-9120
http://www.ael.org/eric/

Journal of Research in Rural Education
Theodore Coladarci, editor
College of Education
University of Maine
5766 Shibles Hall
Orono, ME 04469-5766

National Rural Education Association
Joseph T. Newlin, executive director
246 Education Building
Colorado State University
Fort Collins, CO 80523-1588
(970) 491-7022
http://www.colostate.edu/orgs/NREA/

The Rural Challenge
Paul Nachtigal and Toni Haas, co-directors
P.O. Box 1569
Granby, CO 80446
(970) 887-1064
http://www.ruralchallenge.org/

Directors of Gifted and Talented Education in State Departments of Education

DiAnn Brown, Program Manager
Gifted and Talented Education
Alaska Office of Special Services
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The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development

The Connie Belin National Center for Gifted Education was established by the Iowa State Board of Regents in June 1988. The Center was named for Connie Belin in recognition of her leadership in education. The Center was renamed The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development in February 1995 by the Iowa State Board of Regents. The new name recognizes the extensive support of Myron and Jacqueline N. Blank of Des Moines, Iowa. The new name also reflects the Center's focus on international policy issues as well as its diversification into various areas of exceptional talent.

The Belin-Blank Center is dedicated to the education of gifted and talented students through research, service, and training. Teacher training *courses and workshops offered during the academic year and summer sessions for undergraduate and graduate credit cover a variety of topics and concepts.* Precollege programs *provide selected students in grades 3-11 with challenging educational experiences integrated with cultural and recreational activities.* Talent searches *identify students through nationally standardized tests and provide a database on student's characteristics, educational needs, and learning styles. The Center provides advanced graduate students opportunities for practica and internships.*

The Belin-Blank Center staff is available for consultation to parents and educators about educational and social-emotional programming needs of gifted students. Staff from the Center is also available for in-service workshops, staff development programs, and program evaluations.

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